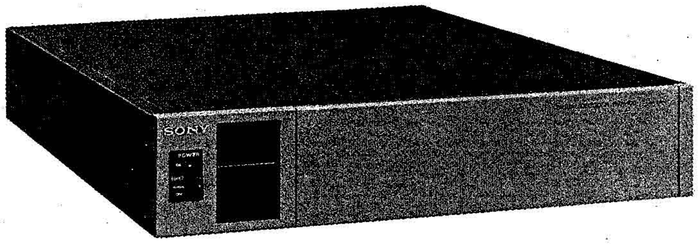
SONY®

DIGITAL DECODER

BVX-100/100P



MAINTENANCE MANUAL
1st Edition
Serial No. 10001 and Higher (J)
Serial No. 10001 and Higher (UC)(BRZ)
Serial No. 10001 and Higher (EK)

SAFETY CHECK-OUT (US Model)

After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the metal trim, "metallized" knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 3.5 mA (500 microampers). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The "limit" indication is 5.25 V so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)

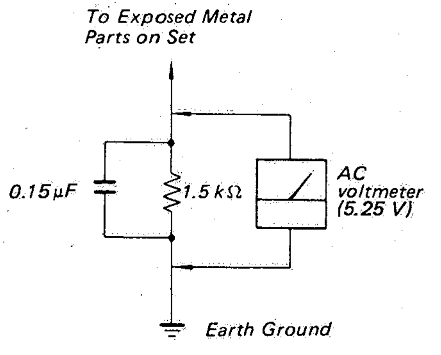


Fig. A. Using an AC voltmeter to check AC leakage.

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第1章
設置

1-1. 設置環境

動作温度：＋5～＋40°C
保存温度：－20～＋60°C
湿度　　：90%以下（結露の無いこと）

BVX-100の重量は13kgです。平坦なしっかりした土台の上に水平に設置して下さい。また，次のような場所への設置は避けて下さい。

- 太陽光線や強力ライト等が当たる場所
- ほこりの多い場所
- 振動のある場所
- 強電界や強磁界のある場所
- 熱源の近く

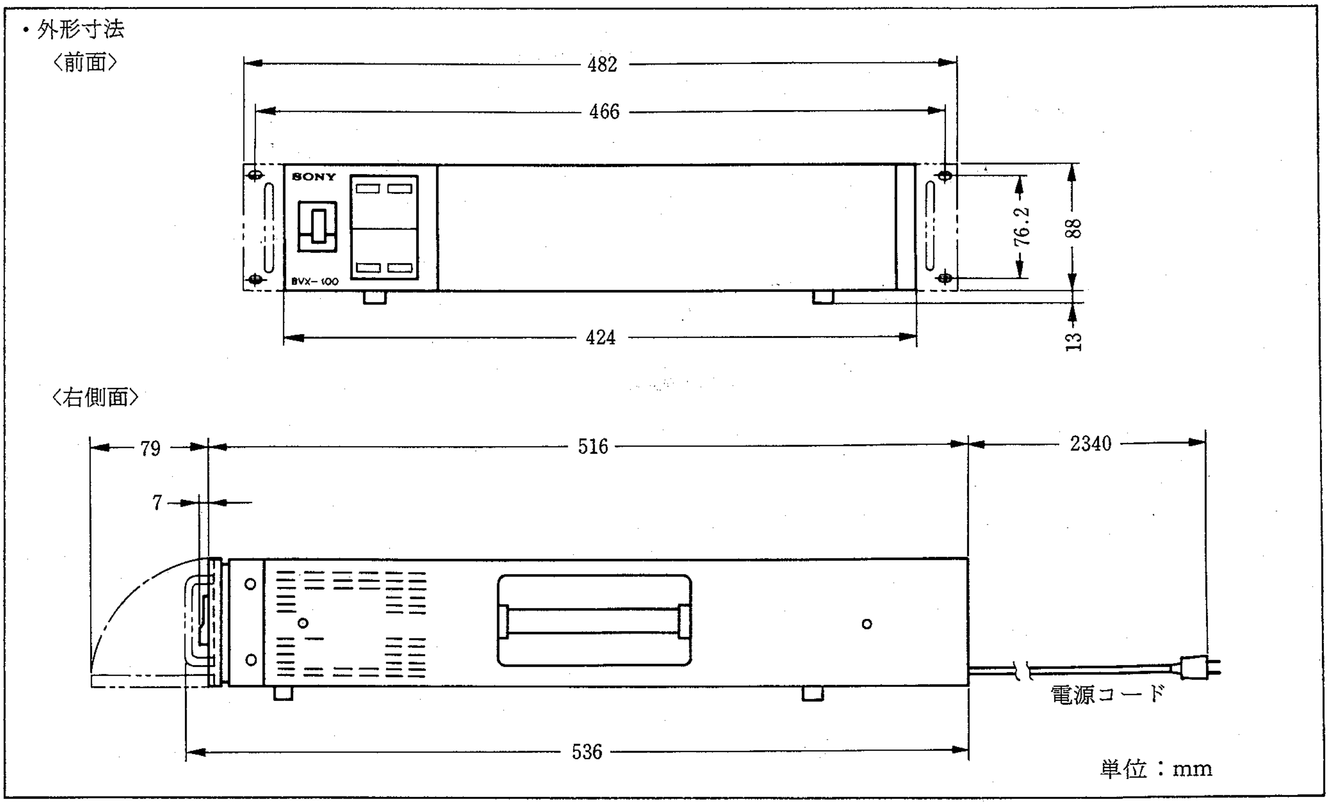
1-2. 電源

BVX-100の電源はスイッチングレギュレーターを使用しています。

電源電圧　：(100-120V モード) AC90-132V
電源周波数：50/60Hz
消費電力　：110W

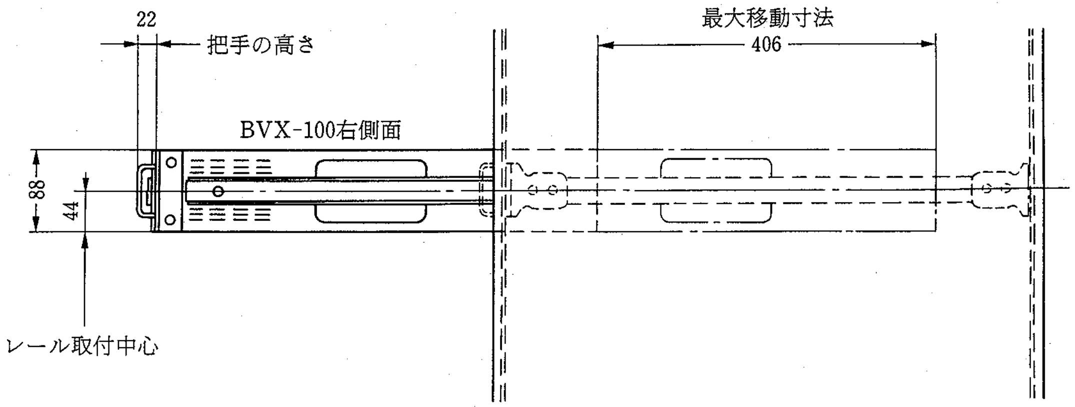
1-3. 設置スペース

設置スペースは次の通りです。コネクターパネルの後方は壁などから15cm 以上離して下さい。



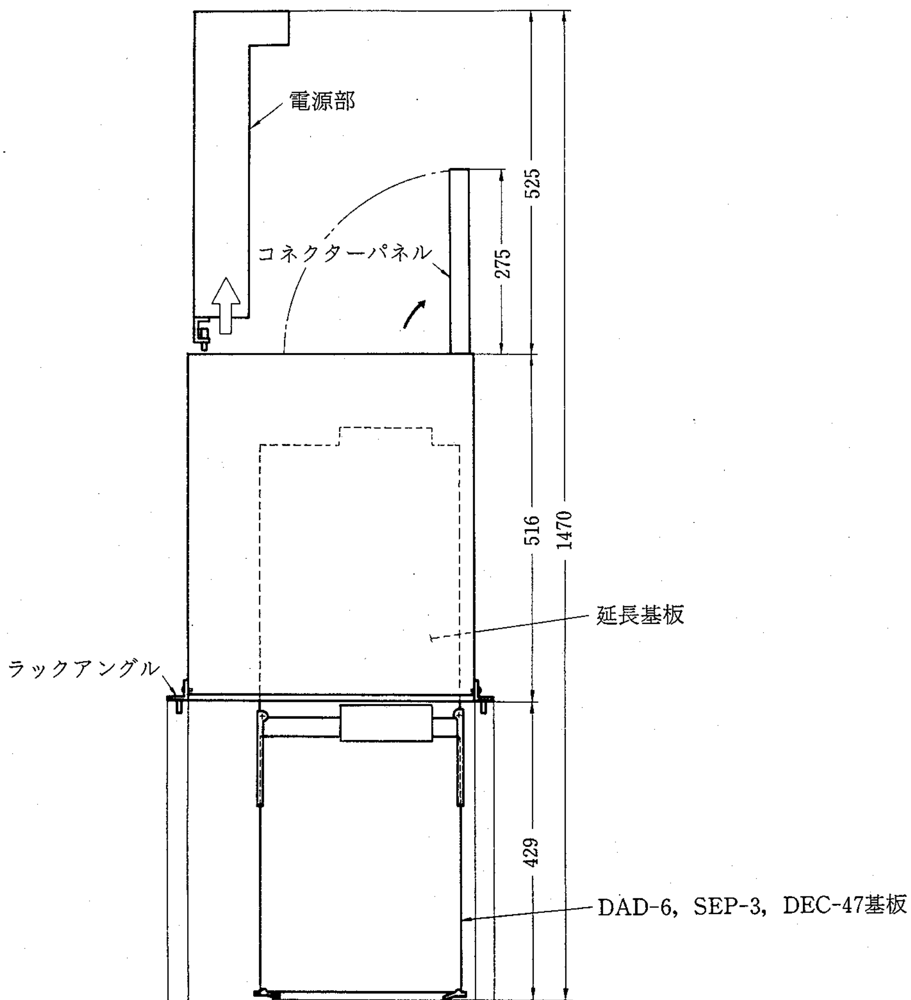
・外形寸法
〈前面〉
482
466
SONY
BVX-100
76.2
88
424
13
〈右側面〉
79
516
2340
7
536
電源コード
単位：mm

- ラックマウント


22
把手の高さ
最大移動寸法
406
BVX-100右側面
88
44
レール取付中心

単位：mm

- 作業スペース


電源部
525
275
コネクターパネル
516
1470
延長基板
ラックアングル
429
DAD-6, SEP-3, DEC-47基板
424
482

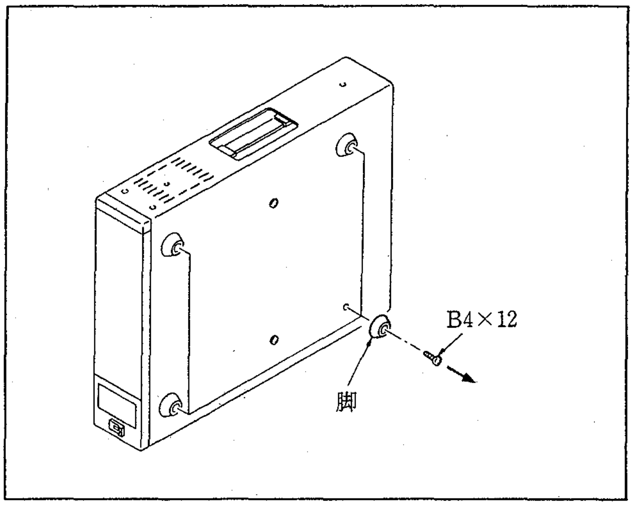
単位：mm

1-4.　ラックマウント

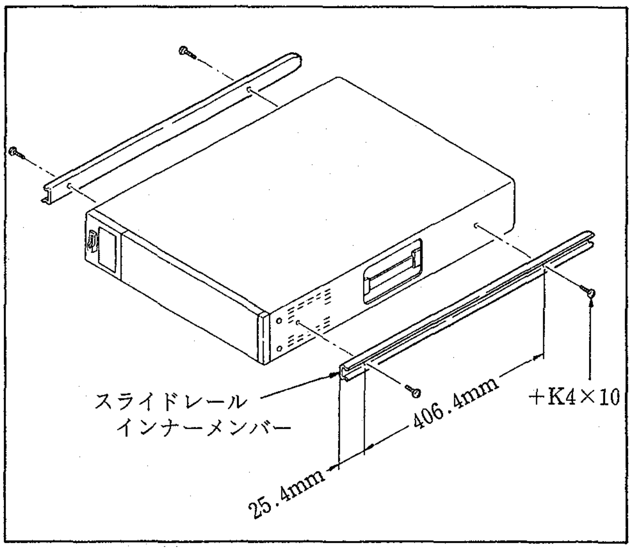
1-4-1.　BVX-100

〔必要な部品〕
- スライドレール（日本アキュライド製，モデル203，22インチ）
- ブラケット（日本アキュライド製，#5507-2）
- ラックアングル組立：２組
- ねじ（＋K　4×10）：４本
- ねじ（＋K　4×12）：４本

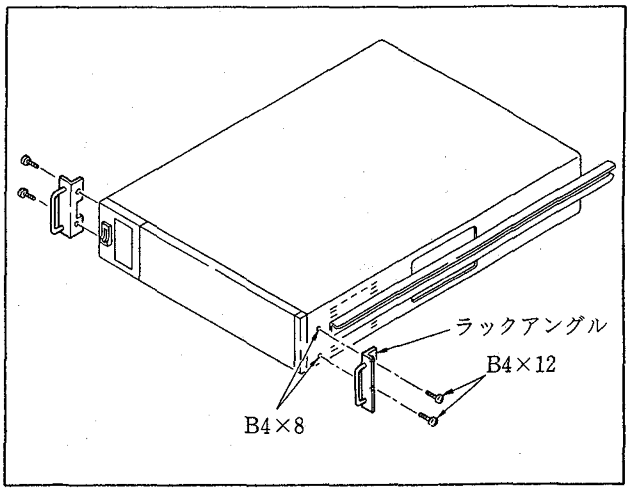
(1)　図に示す４本の脚を外します。



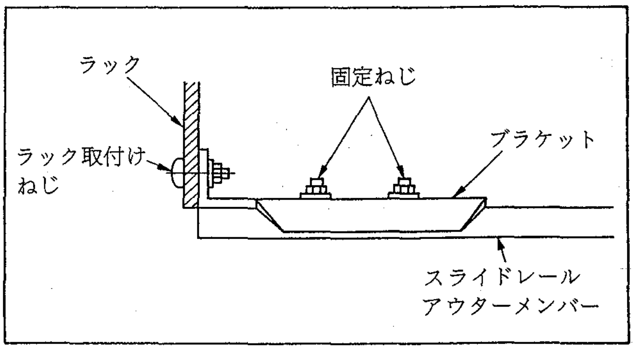
(2)　スライドレールインナーメンバーを図のように取付けます。


スライドレール
インナーメンバー
406.4mm
+K4×10
25.4mm

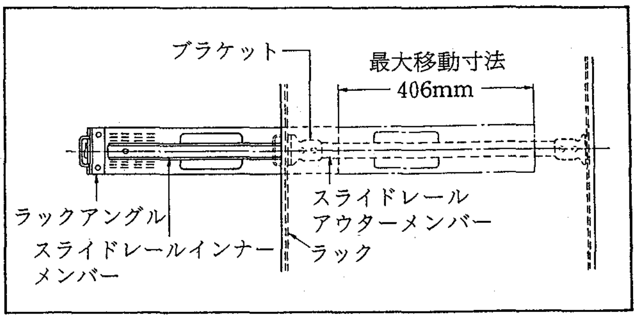
(3)　図に示すB4×8ねじを外します。ブラケットをアウターメンバーに仮止めします。


ラックアングル
B4×12
B4×8

(4)　ブラケットをラックに取付け，ブラケット固定ねじを締め付けます。（固定ねじ及び取付けねじは，スライドレールメーカー推奨のものを使用して下さい。）


ラック
固定ねじ
ブラケット
ラック取付け
ねじ
スライドレール
アウターメンバー

(5)　本体をラックにマウントします。


ブラケット
最大移動寸法
406mm
スライドレール
アウターメンバー
ラックアングル
スライドレールインナー
メンバー
ラック

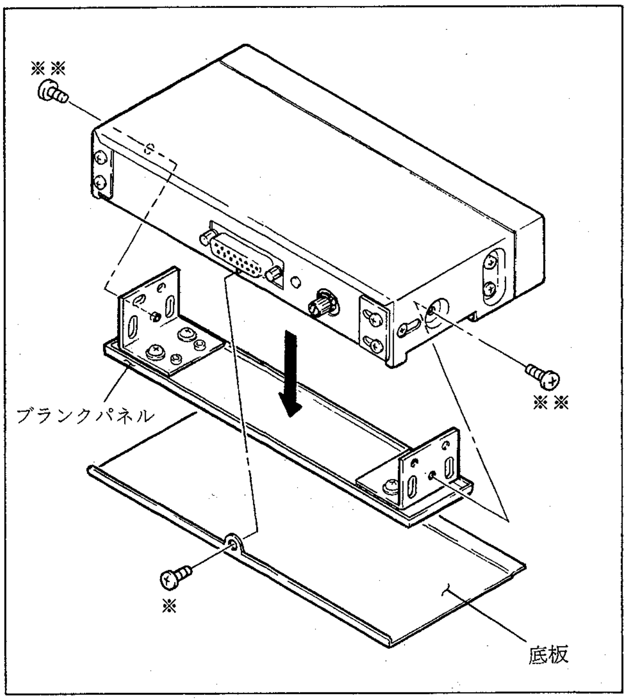
1-4-2. BVR-51

〔BVR-51が一台の場合〕

(1) 図に示す※印のねじを外し，底板を外します。

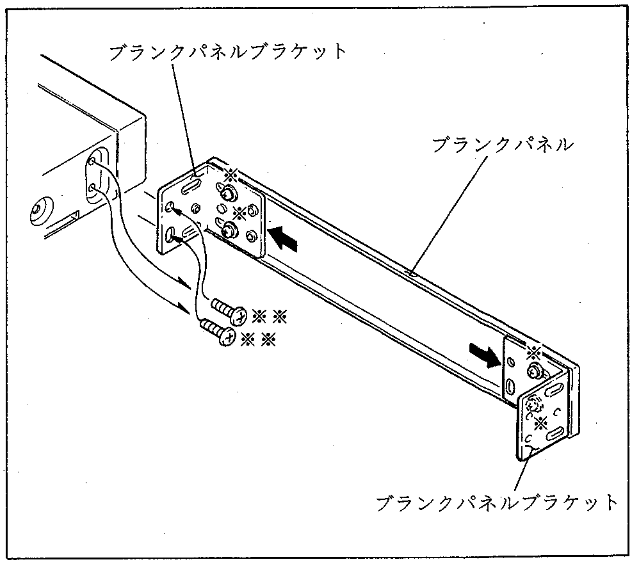
(2) 本体の側面※※印のねじ2本を外し，ブランクパネルを取り出します。

(3) 底板を取り付けます。

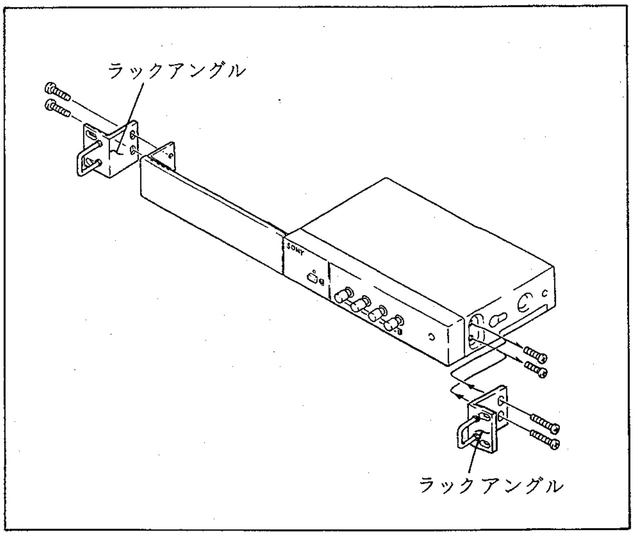


(4) 図に示すブランクパネルの※印のねじ4本を緩め，ブランクパネルブラケットを矢印方向いっぱいに動かし，ねじを締めつけます。

(5) 本体より※※印のねじ2本を取外し，そのねじで本体とブランクパネルを固定します。


ブランクパネルブラケット
ブランクパネル
※
※
※※
※※
※
※
ブランクパネルブラケット

(6) ラックアングルを付属のねじで図のように取り付けます。（本体に取り付けるときは，本体よりねじを取り外してから付属のねじで取り付けます。）

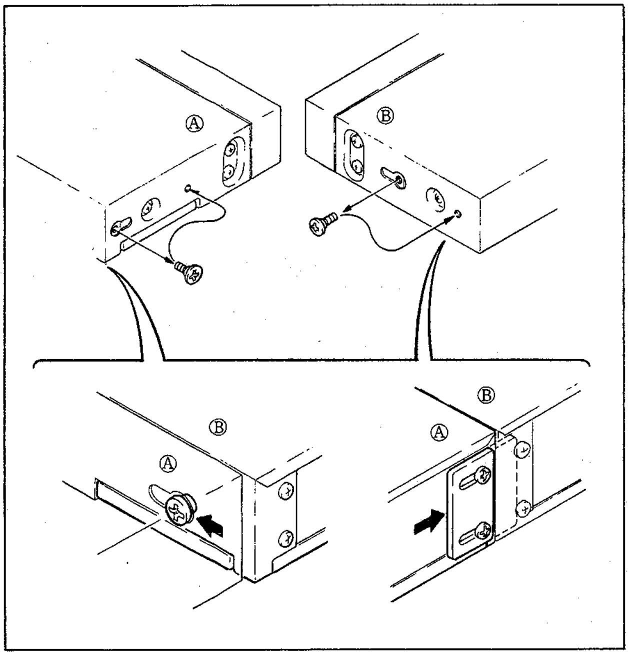

ラックアングル
ラックアングル

〔BVR-51が二台の場合〕

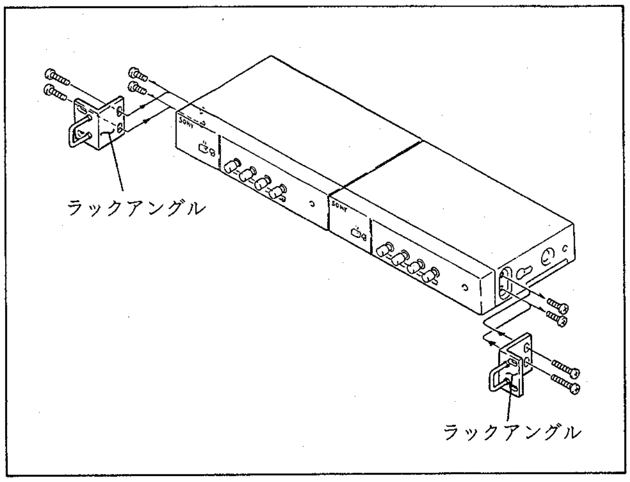
(1) 図のようにねじを付け換えます。

(2) 両方のセットのカギ穴に取り付けたねじを図のように入れ，矢印方向へ移動させます。

(3) セットＡのリヤ側にあるジョイントを止めているねじ２本を緩め，矢印方向いっぱいに動かし，ねじを締めつけます。



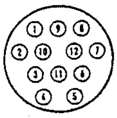
(4) 本体よりねじを取外した後，付属のねじでラックアングルを取付けます。



1-5. 入出力信号

1-5-1. BVX-100

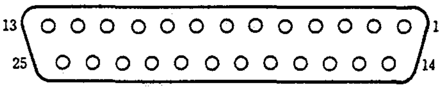
- R/R-Y, G/Y, B/B-Y コネクター：
  BNC コネクター, R/G/B=0.7Vp-p 75ohms
- MIXED SYNC コネクター：
  BNC コネクター, Sync=2Vp-p 75ohms
- REF. VIDEO IN, VIDEO IN コネクター：
  BNC コネクター, 1.0Vp-p 75ohms コンポジット ループ スルー
- MONITOR OUT コネクター：
  BNC コネクター, アナログ コンポジット
- DUB コネクター (12pin)



EXTERNAL VIEW

Pin No.	信号名称	機能
1	Y−BETA+	Y−SIGNAL+
2	Y−BETA−	Y−RETURN−
3	R−Y BETA+	R−Y SIGNAL+
4	R−Y BETA−	R−Y RETURN−
5	B−Y BETA−	B−Y SIGNAL+
6	B−Y BETA+	B−Y RETURN−
7	——	
8	——	
9	——	
10	——	
11	——	
12	——	

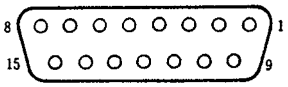
- CCIR656コネクター（25Pin，D-SUB）



EXTERNAL VIEW

Pin No.	信号名称	機能
1	OCK27+	27MHz CLOCK SIGNAL+
2	0V	GND
3	D7+	DATA 7，SIGNAL+
4	D6+	DATA 6，SIGNAL+
5	D5+	DATA 5，SIGNAL+
6	D4+	DATA 4，SIGNAL+
7	D3+	DATA 3，SIGNAL+
8	D2+	DATA 2，SIGNAL+
9	D1+	DATA 1，SIGNAL+
10	D0+	DATA 0，SIGNAL+
11	——	
12	——	
13	0V	GND
14	OCK27−	27MHz CLOCK RETURN−
15	0V	GND
16	D7−	DATA 7，RETURN−
17	D6−	DATA 6，RETURN−
18	D5−	DATA 5，RETURN−
19	D4−	DATA 4，RETURN−
20	D3−	DATA 3，RETURN−
21	D2−	DATA 2，RETURN−
22	D1−	DATA 1，RETURN−
23	D0−	DATA 0，RETURN−
24	——	
25	——	

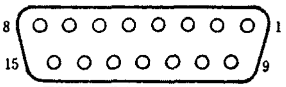
・REMOTEコネクター（15Pin，D-SUB）



EXTERNAL VIEW

Pin No.	信号名称	機能
1	HPHSEREM	H-PHASE CONTROL
2	——	
3	——	
4	IPLVLREM	INPUT LEVEL CONTROL
5	BKLVLREM	BLACK LEVEL CONTROL
6	CRLVLREM	CHROMA LEVEL CONTROL
7	−12V	−12V DC
8	0V	GND
9	0V	GND
10	FRZ REM	FREEZE CONTROL
11	——	
12	——	
13	YC REM	Y/C DELAY CONTROL
14	——	
15	+12V	+12V DC

1-5-2. BVR-51



EXTERNAL VIEW

・REMOTE コネクター (15Pin, D-SUB)

Pin No.	信号名称	機能
1	HPHSEREM	H－PHASE CONTROL
2	——	
3	——	
4	IPLVLREM	INPUT LEVEL CONTROL
5	BKLVLREM	BLACK LEVEL CONTROL
6	CRLVLREM	CHROMA LEVEL CONTROL
7	−12V	−12V DC
8	0V	GND
9	0V	GND
10	FRZ REM	FREEZE CONTROL
11	——	
12	——	
13	YC REM	Y/C DELAY CONTROL
14	——	
15	+12V	+12V DC

1-6.　接続

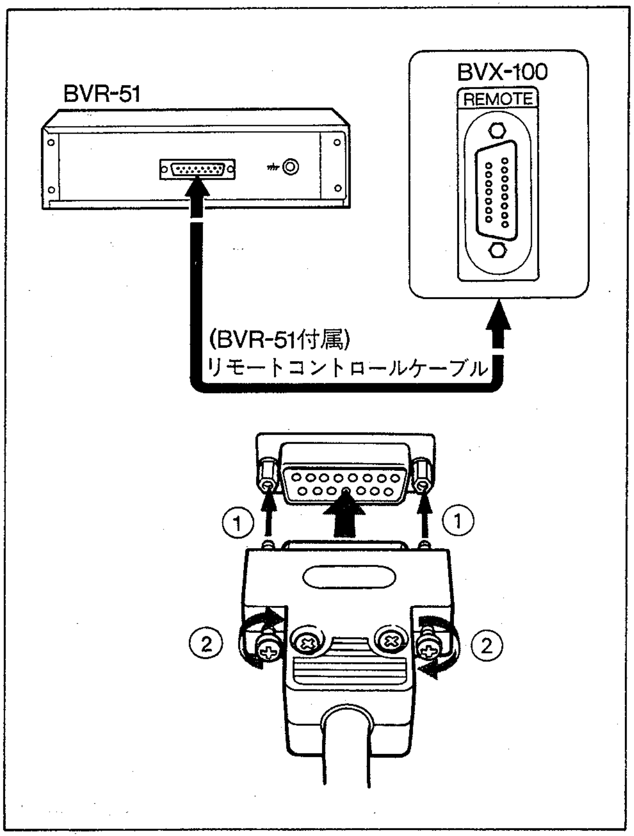
1-6-1.　接続コネクター

設置・サービス時等において裏面パネル上のコネクターにケーブルを接続する際，その先端には次に示すコネクターまたはその同等品を接続して下さい。

パネル表示	接続コネクター/Part No.
REMOTE	ソケット，D-SUB，15P（F）/ 1-563-816-11 BVR-51付属のリモートコントロールケーブルを使用して下さい。
CCIR 656	ソケット，D-SUB，25P（M）/ 1-564-747-11
DUB	プラグ，12P（M）/ 1-560-995-00
R/R-Y	プラグ，BNC，（M）/ 1-560-069-11
G/Y	
B/B-Y	
MIXED SYNC	
REF. VIDEO IN	
VIDEO IN	
MONITOR OUT	

1-6-2. リモートコントロールケーブルの接続

(1) コネクターを差し込みます。
(2) ねじを締め固定します。



1-7. 標準付属品

BVX-100の標準付属品は次の通りです。

- 延長基板，EX-205（1枚）：DAD-6, SEP-3, DEC-47の各基板を電気調整する際に使用します。
- ねじ（+K 4×10）（4本）：BVX-100をラックに取り付ける際に，スライドレールインナーメンバー取り付けねじとして使用します。
- ねじ（+B 4×12）（4本）：BVX-100をラックに取り付ける際に，ラックアングル組立取り付けねじとして使用します。
- ラックアングル組立（2組）：BVX-100をラックに取り付ける際に，使用します。
- オペレーションマニュアル，メンテナンスマニュアル

1-8. 別売付属品

BVX-100の別売付属品は次の通りです。必要に応じて使用して下さい。

- BVR-51：
  リモートコントロールボックスとリモートコントロールケーブルから成ります。BVX-100に接続して遠隔操作時に使用します。
- ラックマウント用スライドレール：
  インナーメンバー2本とアウターメンバー2本から成ります。BVX-100をラックに取り付ける際に使用します。
  (日本アキュライド製，モデル203，22インチ)
- ラックマウント用ブラケット
  BVX-100をラックに取り付ける際に使用します。
  (日本アキュライド製，#5507-2)

SECTION 1
INSTALLATION

1-1. OPERATING CONDITIONS

Operating Temperature : +5～+40°C
Storage Temperature : −20～+60°C
Humidity : Less than 90% (non-condensing)

BVX-100/100P weighs 13Kg. Install the BVX-100/100P on a flatable base. Please avoid installation of the unit in the following locations:

- Exposed to direct sunlight or powerful lighting.
- In a dusty location.
- In a location which is subjected to vibration.
- In a powerful electric or magnetic field.
- In a location which is subjected to electric noise.

1-2. POWER REQUIREMENTS

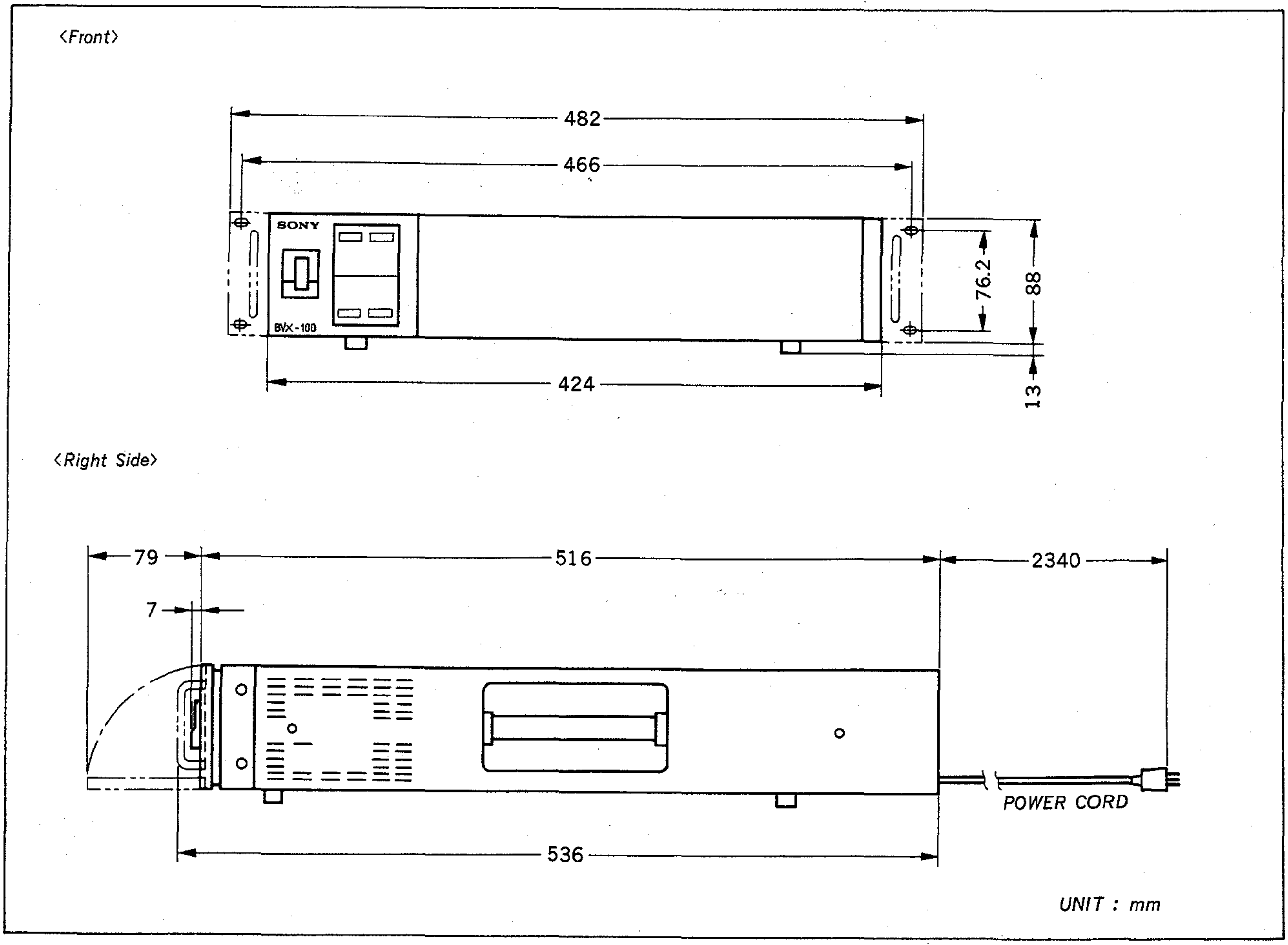
BVX-100/100P uses switching regulators.

Power Line Voltage : (100-120V mode) AC90-132V
(220-240V mode) AC198-264V
Power Line Frequency : 50/60Hz
Power Consumption : 130W

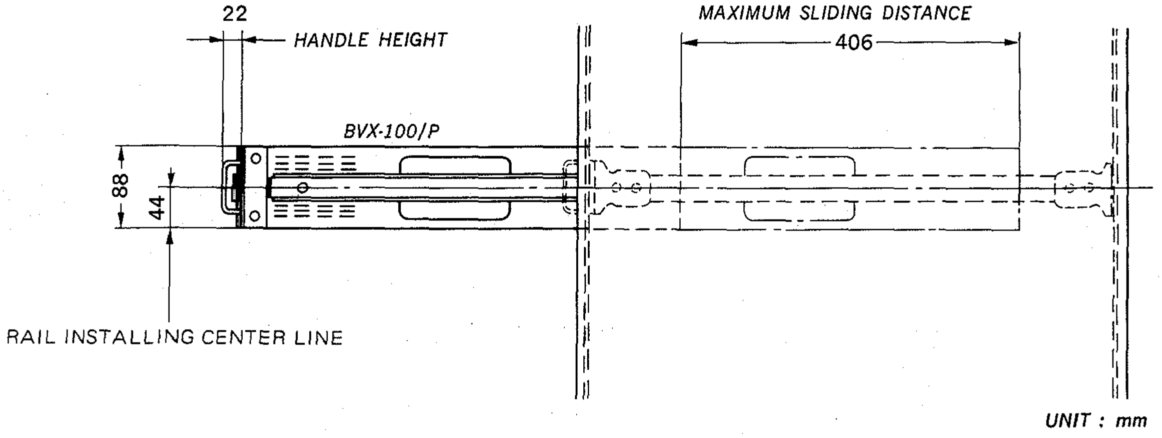
1-3. INSTALLING SPACE

The dimentions are shown in the figure below. The rear (connector panel) should be at least 15cm from walls.

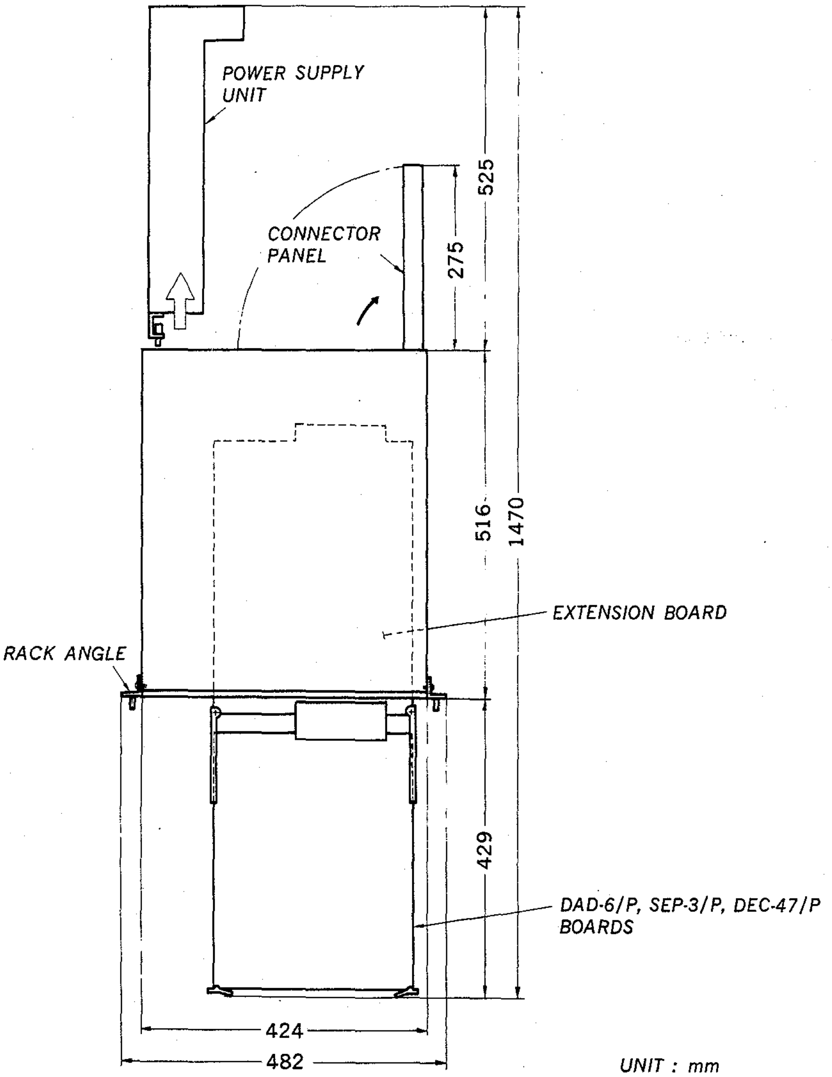
- External Dimensions



⟨Rack Mounting⟩


22
HANDLE HEIGHT
MAXIMUM SLIDING DISTANCE
406
BVX-100/P
88
44
RAIL INSTALLING CENTER LINE
UNIT : mm

⟨Working Space⟩

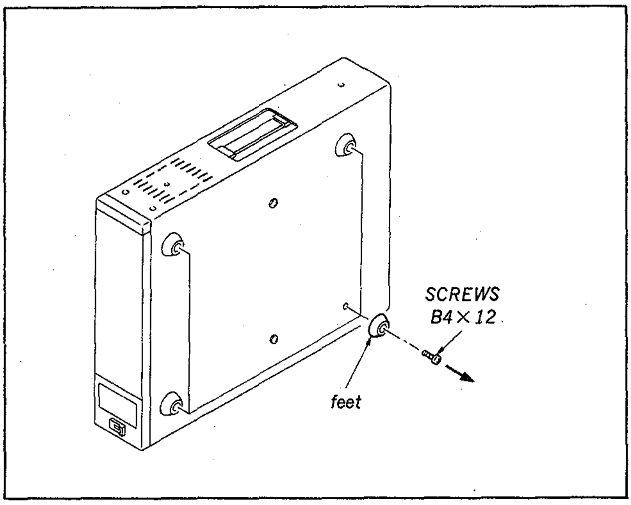

POWER SUPPLY UNIT
CONNECTOR PANEL
525
275
516
1470
EXTENSION BOARD
RACK ANGLE
429
DAD-6/P, SEP-3/P, DEC-47/P BOARDS
424
482
UNIT : mm

1-4. RACK MOUNTING

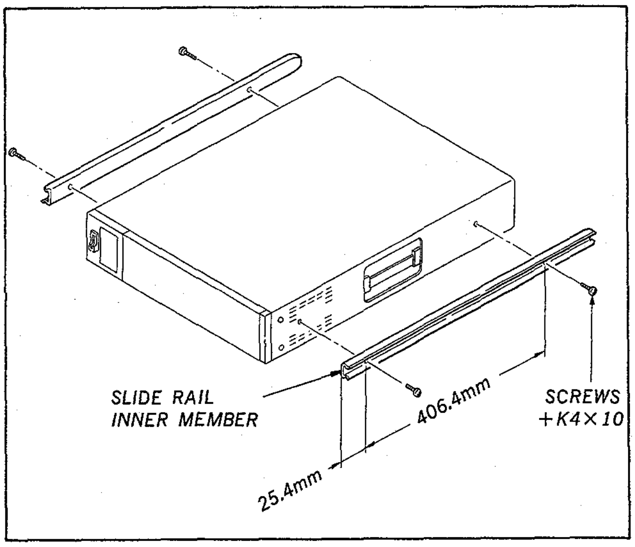
1-4-1. BVX-100/100P

〔REQUIRED EQUIPMENTS〕
- SLIDING RAILS (ACCURIDE MODEL 203)
- BRACKETS (ACCURIDE # 5507-2)
- RACK ANGLE ASS'Y
- 4 SCREWS (+4×10)
- 4 SCREWS (+4×12)

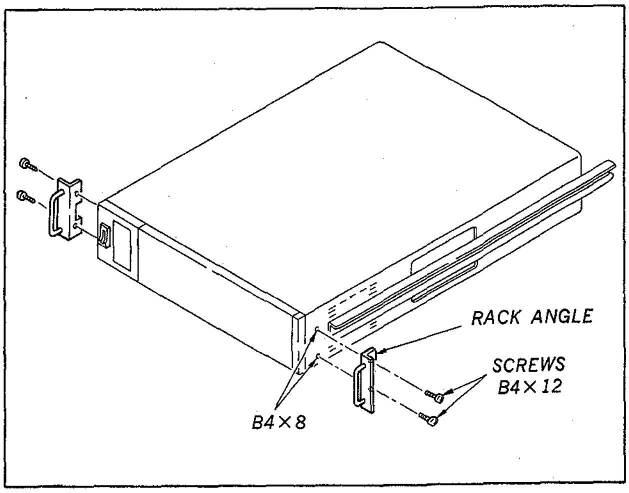
(1) Remove the four screws shown in the figure.


SCREWS
B4×12
feet

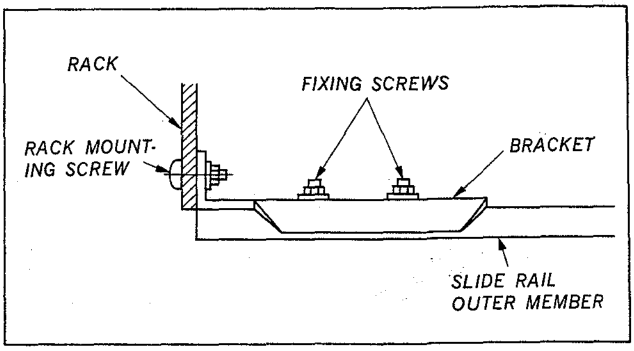
(2) Install the sliding rail's inner member as shown in the figure.


SLIDE RAIL
INNER MEMBER
406.4mm
SCREWS
+K4×10
25.4mm

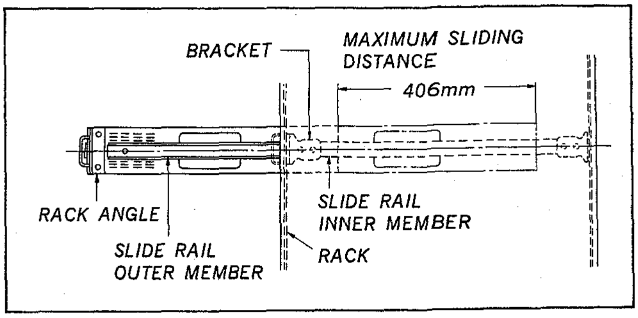
(3) Remove the four screws (B4×8). Temporarily fix the brakets to the outer member.


RACK ANGLE
SCREWS
B4×12
B4×8

(4) Install the brackets to the rack. Tighten the fixing screws of the brackets.
(The fixing screws and the rack mounting screws which are recomended by sliding rail's maker should be used.)


RACK
FIXING SCREWS
RACK MOUNT-
ING SCREW
BRACKET
SLIDE RAIL
OUTER MEMBER

(5) Mount the BVX-100/100P to the rack.


BRACKET
MAXIMUM SLIDING
DISTANCE
406mm
RACK ANGLE
SLIDE RAIL
OUTER MEMBER
SLIDE RAIL
INNER MEMBER
RACK

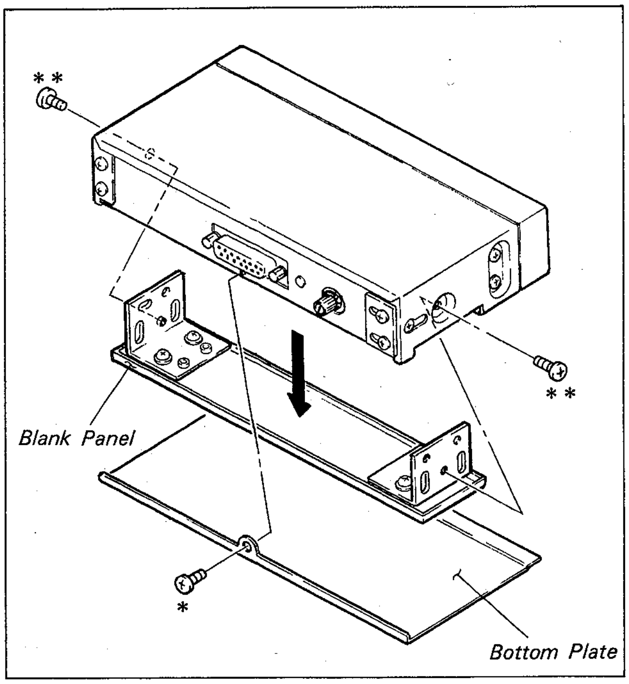
1-4-2. BVR-51

〔Rack-mounting of one BVR-51〕

(1) Remove the fixing screw marked with ＊ shown in the figure. Remove the bottom plate.

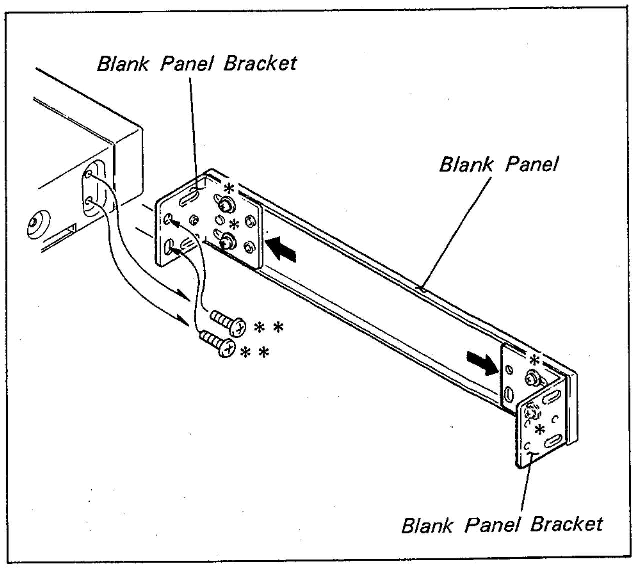
(2) Remove the two fixing screws marked with ＊＊. Take out the blank panel.

(3) Install the bottom plate with the screws which are removed at the avobe step 1.

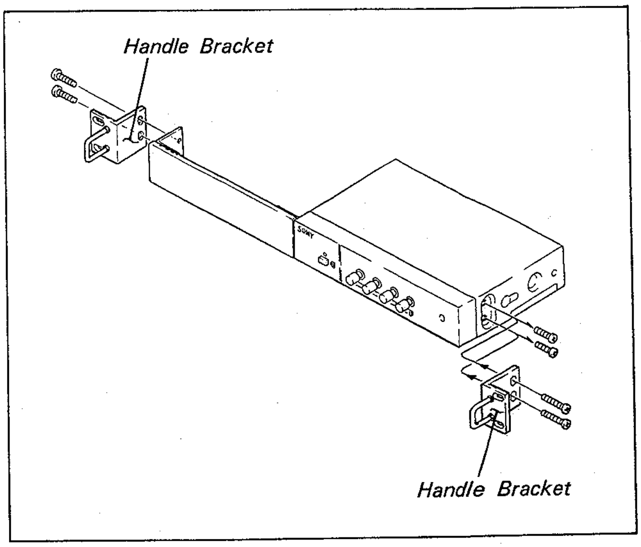

＊＊
Blank Panel
＊＊
＊
Bottom Plate

(4) Loosen the four fixing screws on the blank panel. Move the blank panel bracket in the direction of the arrows. Tighten the fixing screws.

(5) Remove the two fixing screws marked with ＊＊ from the main unit. Install the blank panel to the unit using the ＊＊ screws.


Blank Panel Bracket
Blank Panel
＊
＊
＊＊
＊＊
＊
＊
Blank Panel Bracket

(6) Attach the handle brackets to the unit with supplied screws.
(When the handle bracket is attached on the main unit. Remove the fixing screws from the main unit and attach the handle bracket with the supplied screws.)

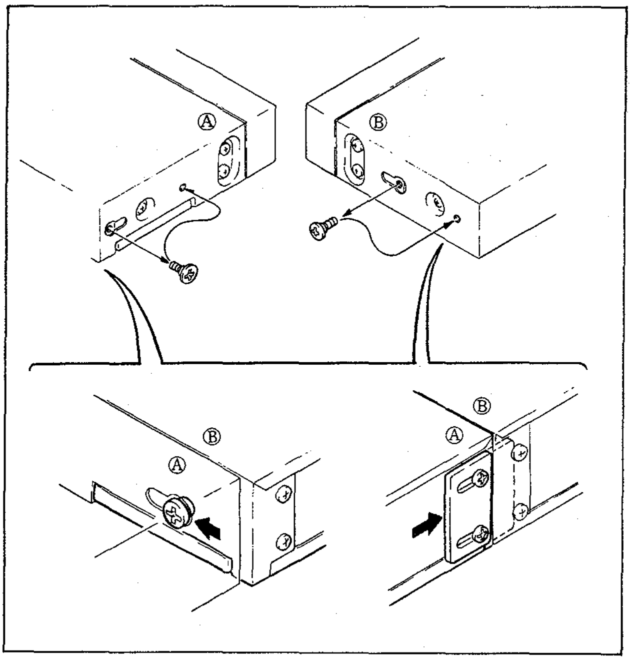

Handle Bracket
Handle Bracket

〔Rack-mounting of two BVR-51〕

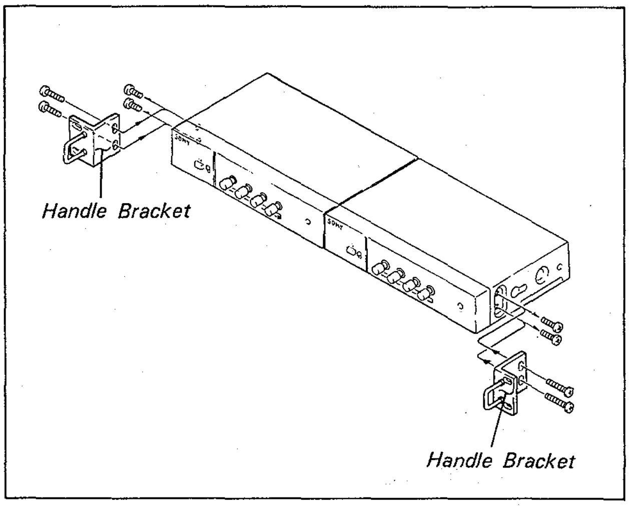
(1) Replace the fixing screws as shown in the figure.

(2) Insert the fixing screws into the holes on each side and move them in the direction of the arrow.

(3) Loosen the two fixing screws on the rear of the unit A. Move the joint fully in the direction of the arrow. Tighten the screws.



(4) Remove the fixing screws from the unit. Attach the handle bracket with the supplied screws.



1-5. INPUT/OUTPUT SIGNALS (REAR PANEL)

1-5-1. BVX-100/100P

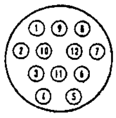
- R/R-Y, G/Y, B/B-Y connectors : BNC connector, R/G/B=0.7Vp-p, 75ohms

- MIXED SYNC connector : BNC connector, Sync=2Vp-p, 75ohms

- REF. VIDEO IN, VIDEO IN connectors : BNC connector, 1.0Vp-p, 75ohms, composite loop thru.

- MONITOR OUT connector : BNC connector, analogue composite

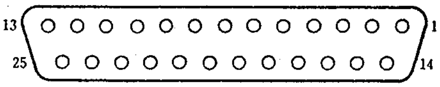
- DUB connector (12Pin)



EXTERNAL VIEW

Pin No.	Signal Description	Function
1	Y−BETA+	Y− SIGNAL+
2	Y−BETA−	Y− RETURN−
3	R−Y BETA+	R−Y SIGNAL+
4	R−Y BETA−	R−Y RETURN−
5	B−Y BETA−	B−Y SIGNAL+
6	B−Y BETA+	B−Y RETURN−
7	——	
8	——	
9	——	
10	——	
11	——	
12	——	

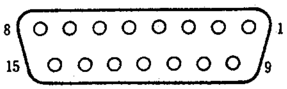
- CCIR656 connector (25Pin, D-SUB)



EXTERNAL VIEW

Pin No.	Signal Description	Function
1	OCK27+	27MHz CLOCK SIGNAL+
2	0V	GND
3	D7+	DATA 7, SIGNAL+
4	D6+	DATA 6, SIGNAL+
5	D5+	DATA 5, SIGNAL+
6	D4+	DATA 4, SIGNAL+
7	D3+	DATA 3, SIGNAL+
8	D2+	DATA 2, SIGNAL+
9	D1+	DATA 1, SIGNAL+
10	D0+	DATA 0, SIGNAL+
11	——	
12	——	
13	0V	GND
14	OCK27−	27MHz CLOCK RETURN−
15	0V	GND
16	D7−	DATA 7, RETURN−
17	D6−	DATA 6, RETURN−
18	D5−	DATA 5, RETURN−
19	D4−	DATA 4, RETURN−
20	D3−	DATA 3, RETURN−
21	D2−	DATA 2, RETURN−
22	D1−	DATA 1, RETURN−
23	D0−	DATA 0, RETURN−
24	——	
25	——	

- REMOTE connector (15Pin, D-SUB)

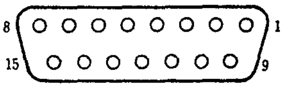


EXTERNAL VIEW

Pin No.	Signal Description	Function
1	HPHSEREM	H−PHASE CONTROL
2	——	
3	——	
4	IPLVLREM	INPUT LEVEL CONTROL
5	BKLVLREM	BLACK LEVEL CONTROL
6	CRLVLREM	CHROMA LEVEL CONTROL
7	−12V	−12V DC
8	0V	GND
9	0V	GND
10	FRZ REM	FREEZE CONTROL
11	——	
12	——	
13	YC REM	Y/C DELAY CONTROL
14	——	
15	+12V	+12V DC

1-5-2. BVR-51

- REMOTE connector (15Pin, D−SUB)



EXTERNAL VIEW

Pin No.	Signal Description	Function
1	HPHSEREM	H−PHASE CONTROL
2	——	
3	——	
4	IPLVLREM	INPUT LEVEL CONTROL
5	BKLVLREM	BLACK LEVEL CONTROL
6	CRLVLREM	CHROMA LEVEL CONTROL
7	−12V	−12V DC
8	0V	GND
9	0V	GND
10	FRZ REM	FREEZE CONTROL
11	——	
12	——	
13	YC REM	Y/C DELAY CONTROL
14	——	
15	+12V	+12V DC

1-6. CONNECTIONS

1-6-1. Connecting Connectors

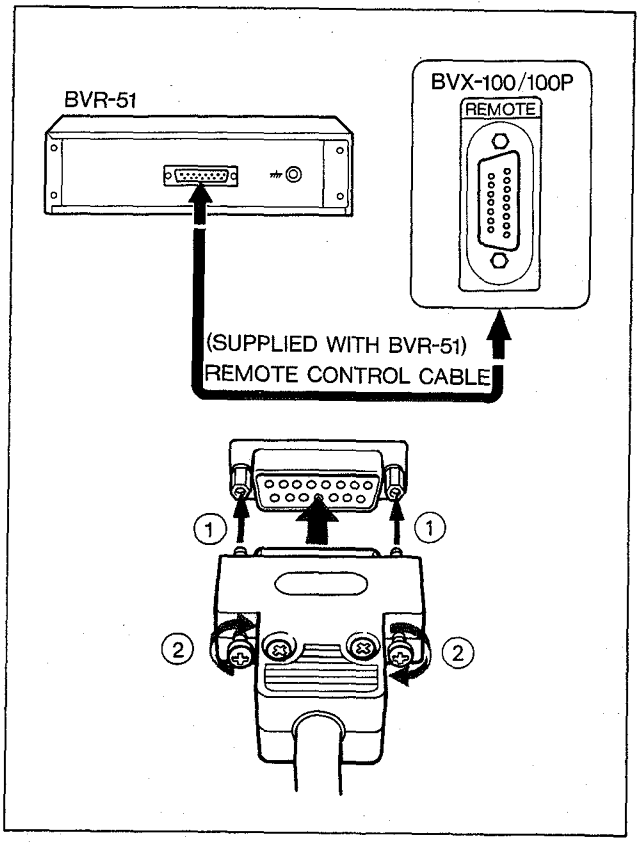
When external cables are connected to the connectors on the rear panel during maintenance, hardware listed below (or equivalents) must be used.

Panel Display	Connecting connectors/Part No.
REMROTE	SOCKET, D−SUB, 15P (F)/ 1-563-816-11 Remote control cable (BVR−51's supplied accessory) is recomended.
CCIR 656	SOCKET, D−SUB, 25P (M)/ 1-564-747-11
DUB	PLUG, 12P (M)/ 1-560-995-00
R/R−Y	PLUG, BNC, (M)/ 1-560-069-11
G/Y	
B/B−Y	
MIXED SYNC	
REF. VIDEO IN	
VIDEO IN	
MONITOR OUT	

1-6-2. Connections of the Remote Control Cable

(1) Insert the connector to the receptacle on the BVR−51 or on the BVX-100/100P.

(2) Fasten the screws to fix the connectors.



1-7. SUPPLIED ACCESSORIES

The followings are the supplied accessories for BVX-100/100P.

- Extension board, EX-205 : It is used when performing the electrical alignment of DAD-6/P, SEP-3/P and DEC-47/P boards.
- 4 Screws (+K 4×10) : When installing BVX-100/100P into the rack, these are used as fixing screws of slider rail inner member.
- 4 Screws (+B 4×12) : When installing BVX-100/100P into the rack, these are used as fixing screws of rack angle ass'y.
- Rack Angle Ass'y. (2Pairs) : When installing BVX-100/100P into the rack, these are used.
- Operation Manual and Maintenance Manual

1-8. OPTIONAL ACCESSORIES

The followings are the optional accessories for BVX-100/100P. Please use them according to your requirements.

- BVR-51 :

  BVR-51 consists of the remote control box and the remote control cable.

  It enables the remote-control of BVX-100/100P.
- Sliding Rails(For rack mounting)

  Sliding rails consist of two inner members and two outer members.

  When installing BVX-100/100P to the rack, they are neccessary.

  (ACCURIDE Model 203, 22inch)

  Sliding Rails should be ordered directly from ACCURIDE.
- Brackets (For rack mounting)

  When installing BVX-100/100P to the rack, they are neccessary.

  (ACCURIDE # 5507-2)

  Brackets should be ordered directly from ACCURIDE.

第2章
テクニカルインフォメーション

2-1　仕様

2-1-1．電源部，他

電源	100～120V（90～132V）/220～240V（198～264V） 50/60Hz（48～62Hz）
消費電力	100W
動作温度	5～40℃
保存温度	－20～＋60℃
湿度	40％以下（結露の無いこと）
寸法	474×88×515mm（幅／高さ／奥行き）
重量	13kg

2-1-2．ビデオ

サンプル周波数：13.5MHz 858×fhn（CCIR601）
量子：8bit
サブキャリア：＞45dB Adaption
バンド幅：Y＝5MHz，R-Y/B-Y＝1.3MHz
R/G/B＝5.5MHz
Kファクター：＜1％ 2Tパルス
S/N比：＞55dB
クロックジッター：±1ns

2-1-3．入力信号

VIDEO IN：1.0Vp-p，75Ω，コンポジット（ループスルー）
REF. VIDEO IN：1.0Vp-p，75Ω，コンポジット（ループスルー）

2-1-4．出力信号

DUB（アナログ　コンポーネント1）：
12pinマルチコネクターY：1.0Vp-p　75Ω　同期負
R/R-Y，G/Y，B/B-Y（アナログ　コンポーネント2）：
BNC型R/G/B＝0.7Vp-p　75Ω
CCIR 656（デジタル　コンポーネント）：
D-SUB 25pin
MIXED SYNC：
BNC型SYNC＝2Vp-p 75Ω
MONITOR OUT（アナログ　コンポジット）：
BNC型

2-1-5．コントロール

ビデオゲインレベル：±3dB
クロマゲインレベル：±3dB
ブラックレベル：±20％
Y/C遅延：±4steps Coarse Preset SW
±50ns Fine
シンク，ビデオ位相：±4steps Coarse Preset SW
シンク位相：＋3μS～－1μS
フリーズ：ON/OFF
フィールド/フレーム：フィールド/フレーム

2-2 回路構成

BVX-100の回路構成は次の通りです。

2-2-1. BVX-100

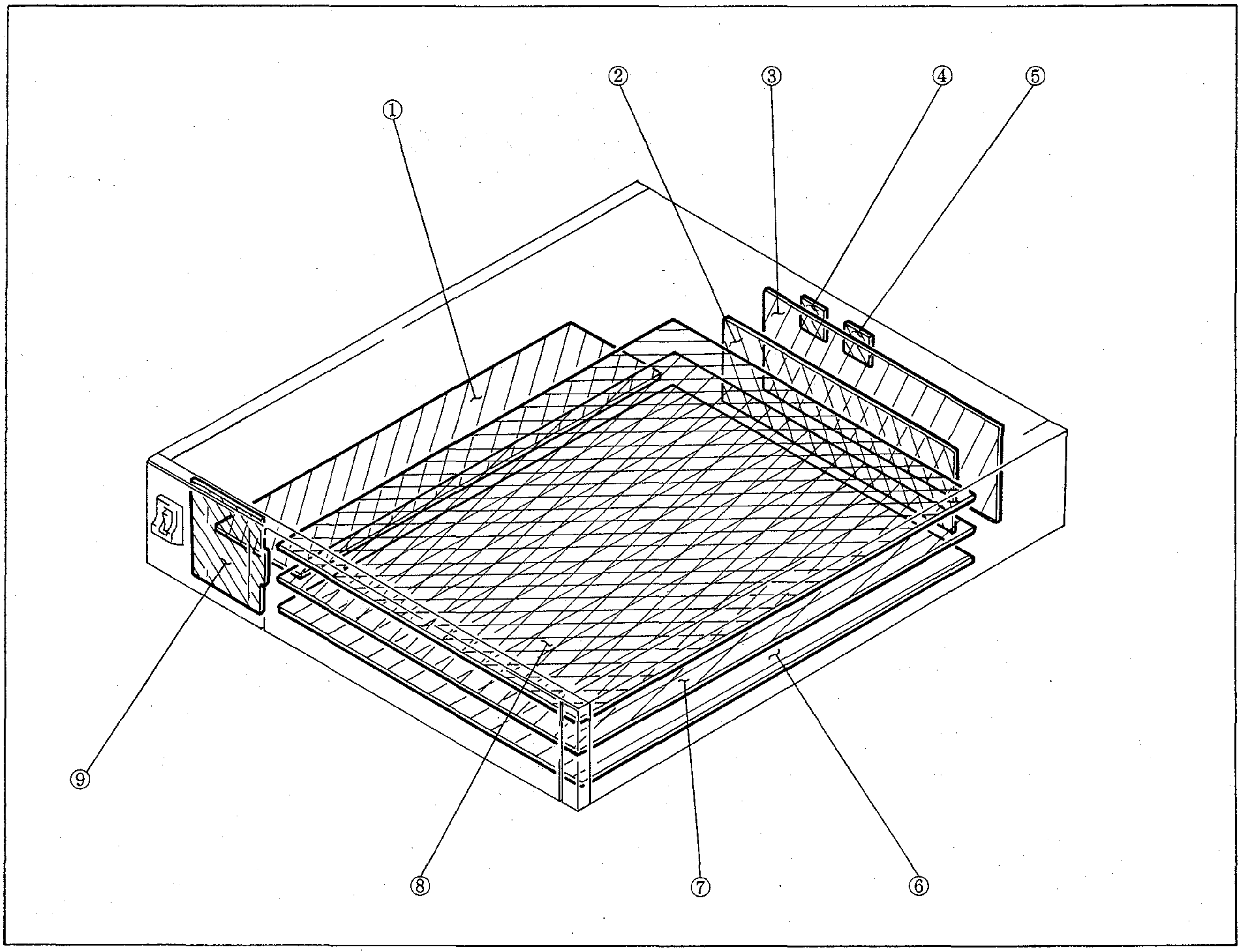
基板名	回路機能
DAD-6	アナログプロセッサー
SEP-3	Y/C 分離
DEC-47	デモジュレーター
VIO-14 VA-84	アナログ入力／出力
DSP-25	インディケーター
SW-283B/C	入力セレクター
MB-236	マザーボード
PS-195	レギュレーター
EX-205	延長基板

2-2-2. BVR-51

基板名	回路機能
RM-73	リモートコントロール
RM-52C	リモートコントロール
RM-60B	リモートコントロール
RM-61B	リモートコントロール

2-3 プリント基板配置図

BVX-100のプリント基板の位置は次の通りです。



① PS-195	⑥ SEP-3
② MB-236	⑦ DEC-47
③ VIO-14 VA-84	⑧ DAD-6
④ SW-283B	⑨ DSP-25
⑤ SW-283C	

SECTION 2
TECHNICAL INFORMATION

2-1. SPECIFICATION

2-1-1. GENERAL

Power Requirements:
100V thru. 120V (90 thru. 132V)/
220 thru. 240V (198 trhu. 264V)
50/60Hz (48 thru. 62Hz)
Power Consumption : 100W
Operating Temperature : 5 thru.40°C
Storage : −20 thru. +60°C
Humidity : Less than 40% (no-condensing)
Dimensions : 474×88×515mm (Width/Height/Depth)
Weight : 13Kg

2-1-2. VIDEO

Sampling Frequency : FOR NTSC, PAL-M : 13.5MHz 858×fhn (CCIR601)
FOR PAL : 13.5MHz 864×fhp (CCIR601)
Quantizing : 8bit
Subcarrier Rejection : >45dB Adaption
Band Width : Y=5MHz, R-Y/B-Y=1.3MHz
R/G/B=5.5MHz
K-factor : <1% 2T Pulse
S/N ratio : >55dB

2-1-3. Input Signals

VIDEO IN : 1.0Vp-p, 75Ω, Composite Loop Thru.
REF. VIDEO IN : 1.0Vp-p, 75Ω, Composite Loop Thru.

2-1-4. Output Signals

DUB (Analogue Component-1):
12pin Multi Connector Y: 1.0Vp-p 75Ω Negative
R/R-Y, G/Y, B/B-Y (Analogue Component-2):
BNC type, R/G/B=0.7Vp-p 75Ω
CCIR 656(Digital Component): D-SUB 25pin
MIXED SYNC: BNC type SYNC=2Vp-p 75Ω
MONITOR OUT (Analogue Composite): BNC type

2-1-5. CONTROL

Video Gain Level : ±3dB
Chroma Gain Level : ±3dB
Black Level : ±20%
Y/C Delay : ±4steps Coarse Preset SW
±50ns Fine
Sync to Video Phase : ±4steps Coarse Preset SW
Sync Phase : +3uS thru. −1uS
Freeze : ON/OFF
Field/Frame : Field/Frame

2-2. CIRCUIT INFORMATION

The function of each circuit is listed in the table below.

2-2-1. BVX-100/100P

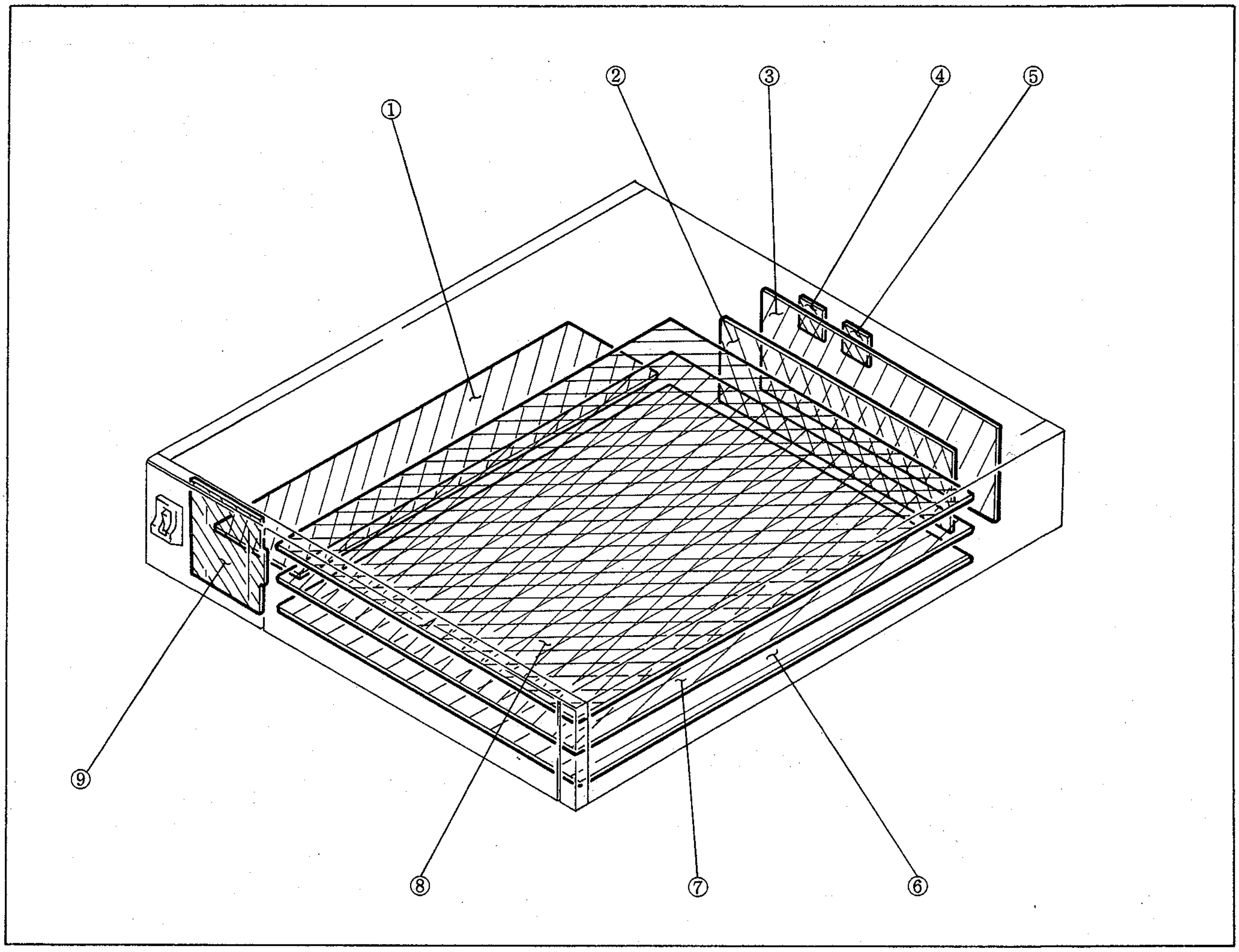
Description	Function
DAD-6/P	Analogue Processor
SEP-3/P	Y/C Separation
DEC-47/P	Demodulation
VIO-14/P VA-84	Analogue Input/Output
DSP-25	Indicator
SW-283B/C	Input Selector
MB-236	Mother Board
PS-195	Regulator
EX-205	Extension Board

2-2-2. BVR-51

Description	Function
RM-73	Remote Control
RM-52C	Remote Control
RM-60B	Remote Control
RM-61B	Remote Control

2-3. LOCATIONS OF PRINTED CIRCUIT BOARDS

Locations of printed circuit boards in BVX-100/100P are shown in the figure.



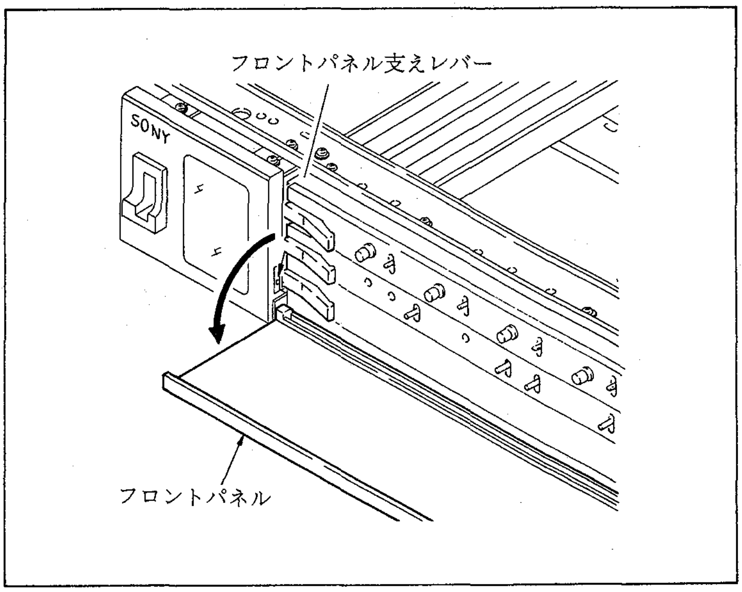
① PS-195	⑥ SEP-3/P
② MB-236	⑦ DEC-47/P
③ VIO-14/P VA-84	⑧ DAD-6/P
④ SW-283B	⑨ DSP-25
⑤ SW-283C	

第3章
サービスインフォメーション

3-1 外装の取外し

3-1-1. フロントパネル

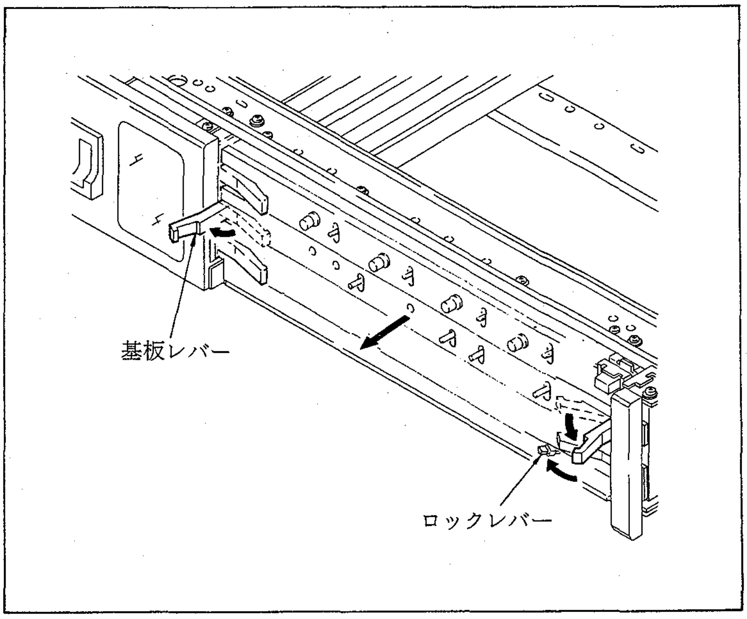
- フロントパネル上面を指で押すと，フロントパネルは矢印方向に開きます。再度押すと，ロックされます。
- フロントパネル支えレバーを指又はドライバーの先で押すと，フロントパネルを外すことができます。


フロントパネル支えレバー
SONY
フロントパネル

3-1-2. DAD-6，SEP-3，DEC-47基板

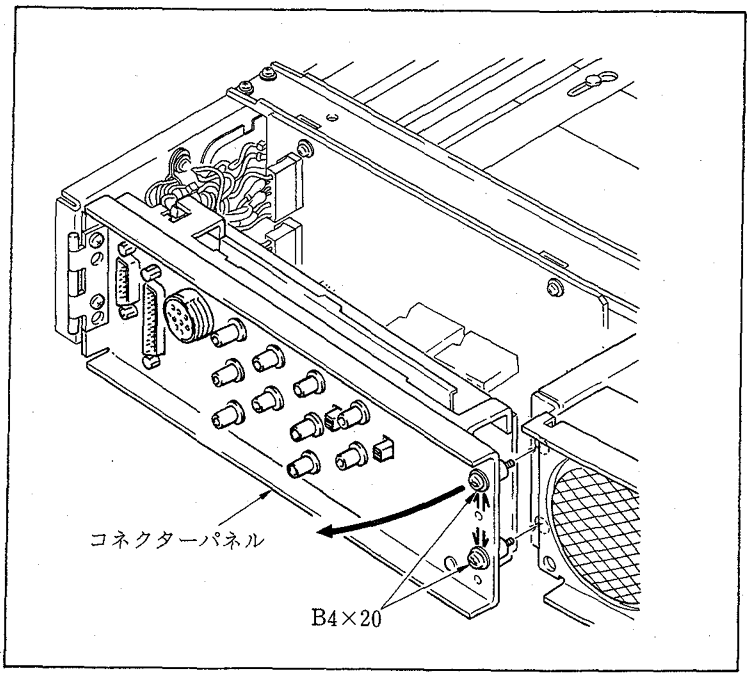
取外し
- ロックレバーを矢印方向に動かします。
- 左右の基板レバーを矢印方向に起こします。
- 基板を手前に引き出します。

取り付け
- ロックレバーを矢印方向に動かしたままにします。
- 左右の基板レバーを矢印の方向に起こしたままの状態で基板を差込み，基板が突き当たったところで基板レバーを反矢印方向（内側）に倒します。
- ロックレバーを反矢印方向（右側）に戻します。


基板レバー
ロックレバー

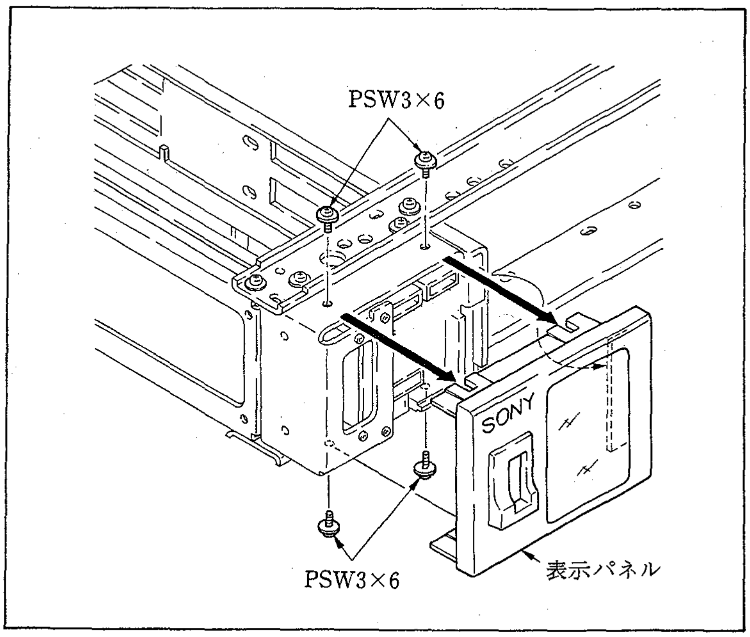
3-1-3. コネクターパネル

- 図に示す２本のねじを緩めます。
- コネクターパネルを手前に開くことができます。


コネクターパネル
B4×20

3-1-4. 表示パネル

- 天板を取外します。(3-1-5章参照)
- 底板を取外します。(3-1-5章参照)
- 図に示すねじ４本を外すと，表示パネルを取り外すことができます。


PSW3×6
SONY
PSW3×6
表示パネル

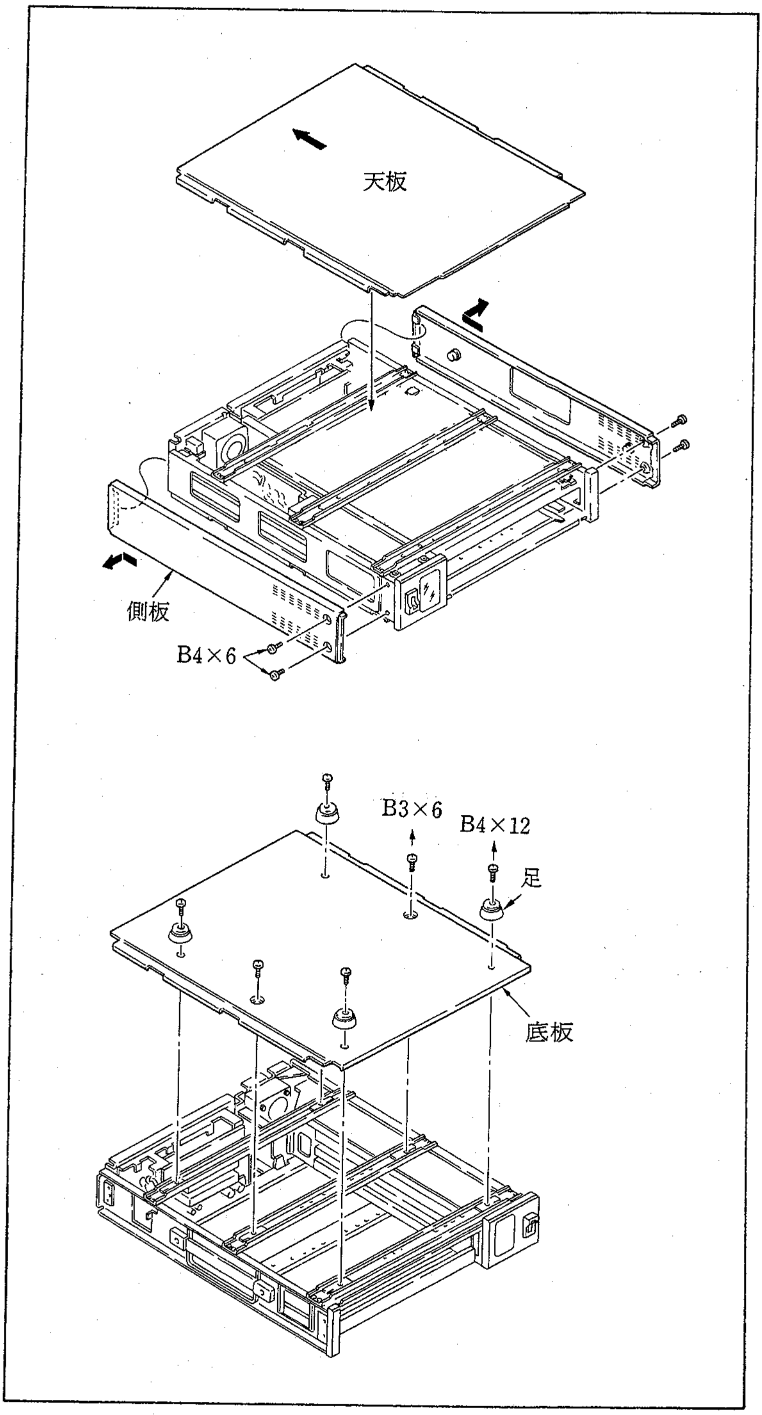
3-1-5. 側板，天板，底板

側板，天板の取外し

- 図に示すねじ４本を外し，側板を矢印方向に動かしながら外します。
- 天板を矢印方向に引き，外します。

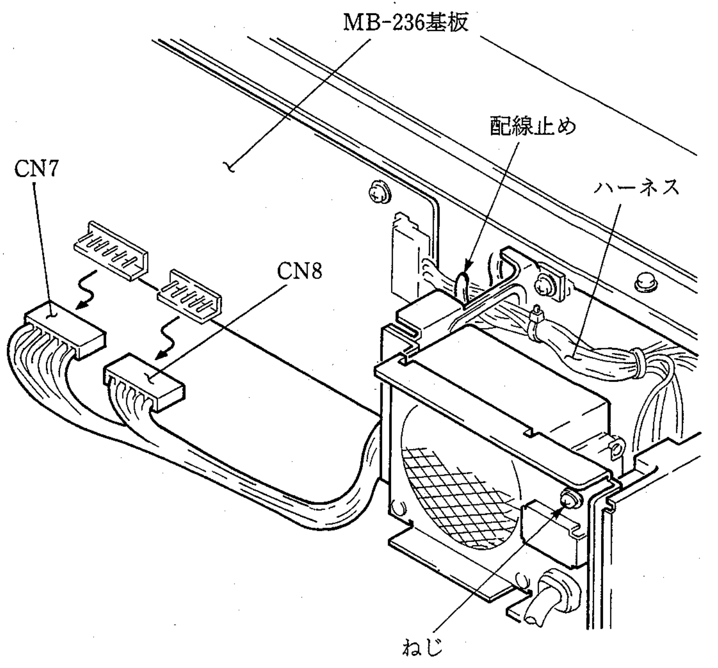
底板の取外し

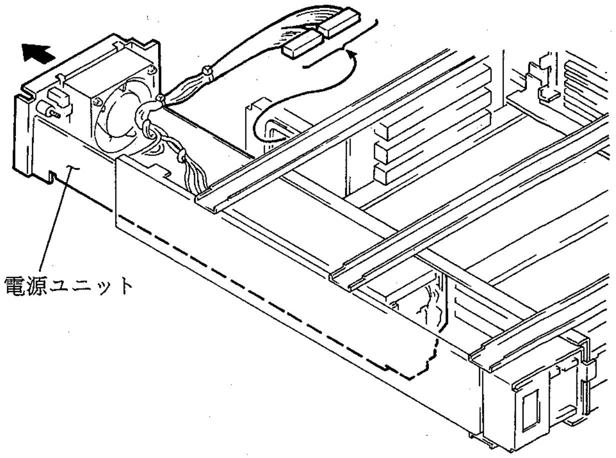
- 図に示す６本のねじを外します。
- 脚４個と，側板を外すことができます。


天板
側板
B4×6
B3×6
B4×12
足
底板

3-1-6. 電源部

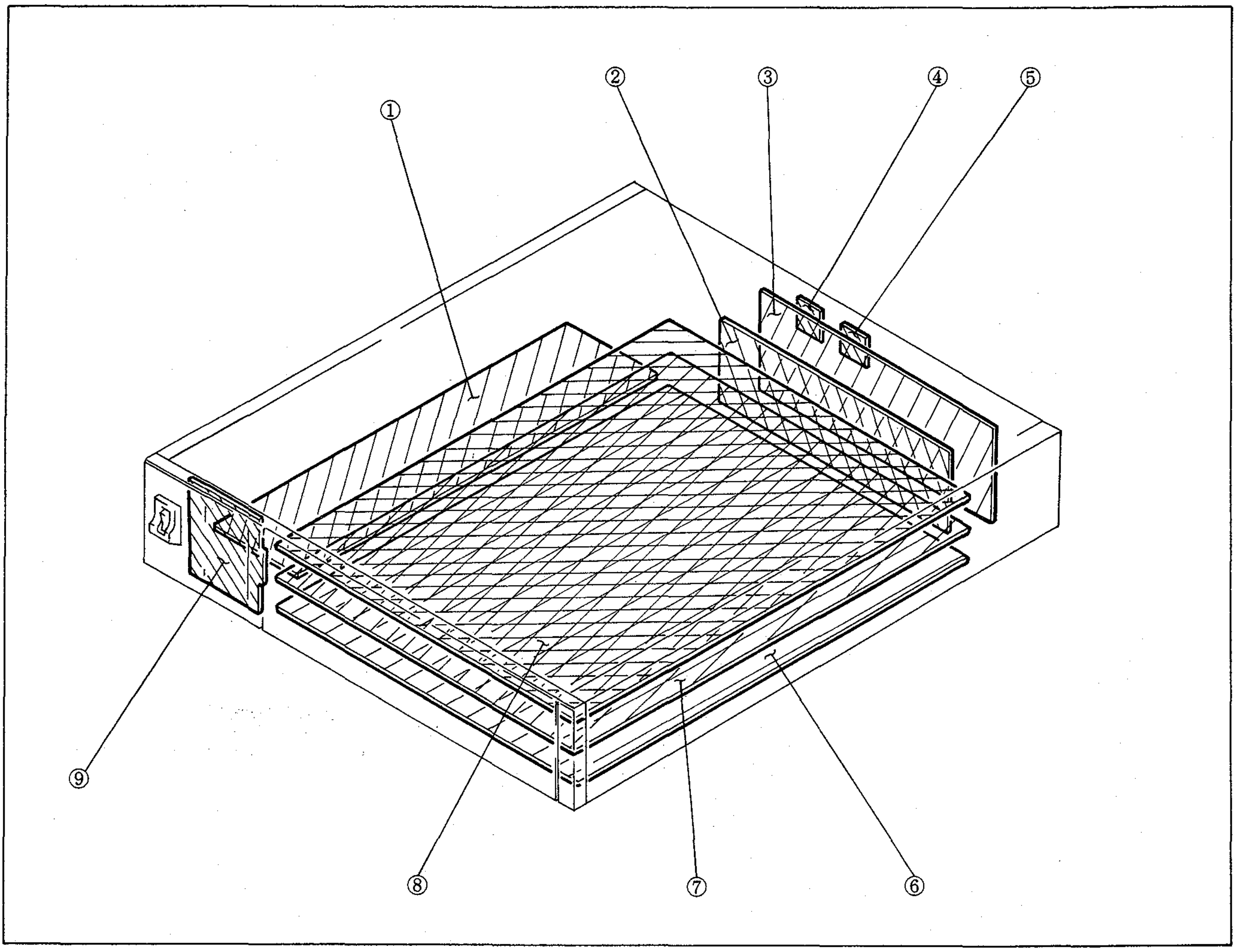
- コネクターパネルを開きます。(3-1-3章参照)
- 図に示すねじを緩めます。(ねじにはストッパーが付いているため，外さないで下さい。)
- コネクターCN7，8を外します。
- 配線止めを緩め，ハーネスを電源ユニットに押し入れます。
- 電源ユニットを図のように引き出します。


MB-236基板
配線止め
CN7
ハーネス
CN8
ねじ



3-2 プリント基板配置図

BVX-100のプリント基板の位置は次の通りです。



① PS-195
② MB-236
③ VIO-14
VA-84
④ SW-283B
⑤ SW-283C
⑥ SEP-3
⑦ DEC-47
⑧ DAD-6
⑨ DSP-25

3-3　基板上セレクトスイッチの設定

コントロールパネル及びコネクターパネル上にあるセレクトスイッチの他，基板上に次のようなセレクトスイッチがあります。必要に応じて使用して下さい。

3-3-1．SEP-3基板

- スイッチ機能と設定

S1，S20：テストスイッチ
これらのスイッチは製造用の目的にのみ使用します。工場出荷状態を変えないで下さい。
（工場出荷状態：3，4側に設定）

S2：クロマ遅延
工場出荷状態を決して変えないで下さい。
（工場出荷状態：目盛Eに設定）

S4：出力フォーマット選択
このスイッチによりBNCコネクターにRGB信号を出力するか，YCR CB信号を出力するかを選択します。
（工場出荷状態：RGB）

S5：バンド幅リミット
このスイッチを使用すると，FREEZEモード時，BWLIMIT（バンド幅リミット）信号により，クロマのバンド幅をリミットすることができます。S1(1)のみをOFFに設定すると通常動作が得られます。
（工場出荷状態：(1)のみOFF）

S6(1)：未使用
工場出荷状態を変えないで下さい。
（工場出荷状態：OFF）

S6(2)：525/625選択
（工場出荷状態：OFF）

S6(3)：BYPASS
（工場出荷状態：ON）

S6(4)：フィールドくし型
（工場出荷状態：ON）

S6(5)：ラインくし型
（工場出荷状態：ON）

S7：BYPASS遅延
工場出荷状態を決して変えないで下さい。
（工場出荷状態：目盛2に設定）

S8：Y遅延
工場出荷状態を決して変えないで下さい。
（工場出荷状態：目盛7に設定）

3-3-2. DEC-47基板

- スイッチ機能と設定

S1，S3：VISC 位相調整

このロータリースイッチにより，サブキャリアバーチカルインサーションのディスクリート位相調整されています。S1を1目盛動かすことにより，位相は96°変化します。S3を1目盛動かすことにより，位相は192°変化します。

（工場出荷状態：S1は目盛 0 に設定，S3は ON に設定）

S2：色相調整 LSB

このロータリースイッチは色相調整ワードの下位 byte をコントロールします。目盛0に設定すると通常動作が得られます。

（工場出荷状態：目盛0に設定）

S4：色相調整 MSB

このロータリースイッチは色相調整ワードの上位 byte をコントロールします。目盛0に設定すると通常動作が得られます。

（工場出荷状態：目盛0に設定）

S5：カラーフレームシーケンスコントロール（フロントパネル上スイッチ）

BVX-100をフレームシンクロナイザーとして使用した場合，このスイッチを ON に設定することにより，出力信号のカラーフレームシーケンスを強制的に補正します。

（工場出荷状態：ON）

S6：PHASE PRESET/MANUAL 選択

PRESET 側に設定すると S14，16の設定にかかわらず，一定のビデオ位相が得られます。一方，MANUAL 側に設定すると S14，16により Y/C 位相を変化させることができます。

（工場出荷状態：MANUAL）

S7：(1)：自動 FREEZE

このスイッチを使用すると，万一入力ビデオ信号に誤りがあっても自動 FREEZE 機能が働きます。OFF に設定することにより自動 FREEZE 機能が得られます。

（工場出荷状態：OFF）

S7(2)：未使用

工場出荷状態を変えないで下さい。

（工場出荷状態：ON）

S7(3)：Y　16CK 遅延

工場出荷状態を変えないで下さい。

（工場出荷状態：OFF）

S8(1)～(8)：サブキャリア発生コントロール

このスイッチにて，サブキャリア発生器位相ロックループコントロールフィールターをコントロールします。工場出荷状態を決して変えないで下さい。

（工場出荷状態：(2)のみ OFF に設定）

3-3-3. DAD-6基板

- スイッチ機能と設定

S1(1)〜(8), S2(1)〜(8)：V ブランキング調整スイッチ
S1の(1)〜(8)と S2の(1)〜(8)をすべて ON に設定するとブランキング調整します。
（工場出荷状態：すべて ON）

S3(1)：20LINE/21LINE V ブランキング選択
V ブランキングを20LINE/21LINE 切り替えします。
ON に設定すると20LINE, OFF で21です。
（工場出荷状態：OFF）

S3(2)：HALF LINE MASKING
このスイッチにより HALF LINE の MASKING 可/不可を選択することができます。ON に設定すると MASKING 可, OFF で不可です。
（工場出荷状態：ON）

3-4 サービス部品

(1) 安全重要部品
回路図, 分解図, 電気部品リスト中で⚠印および ▨ で囲まれた部品は安全性を維持するために重要な部品です。従って，これらの部品を交換する時には，必ず指定の部品と交換してください。

(2) パーツセンターから供給される部品は，実際にセットに使用している部品と形状等が異なることが時々あります。これらは，「部品の共通化」等によるものです。

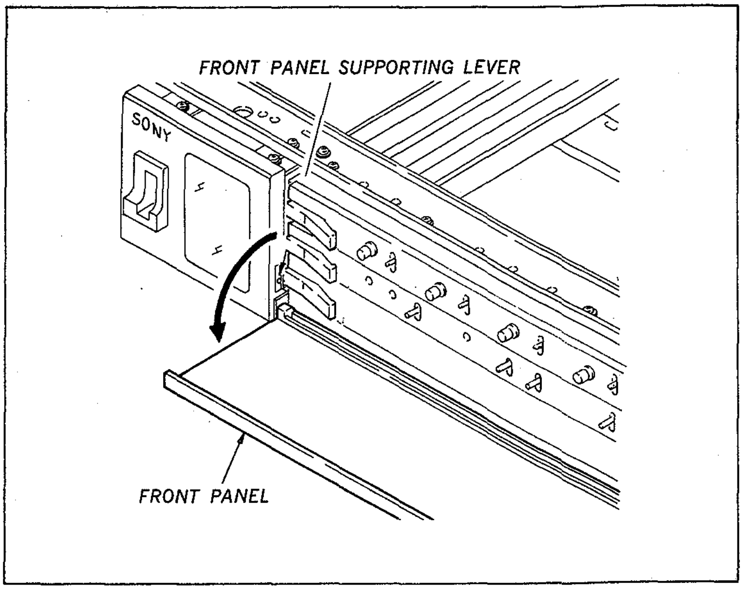
(3) 分解図, 電気部品リスト中, SP 欄が S で示されている部品は常時在庫します。SP 欄が O で示されている部品は交換頻度が低い部品ですので在庫していないことがあり，納期が長くなることがあります。

SECTION 3
SERVICE INFORMATION

3-1. REMOVAL OF ORNAMENTAL PANELS

3-1-1. FRONT PANEL

- To open the front panel, push it near the top to release the catch.
- To close the front panel, push it near the top to lock the catch.



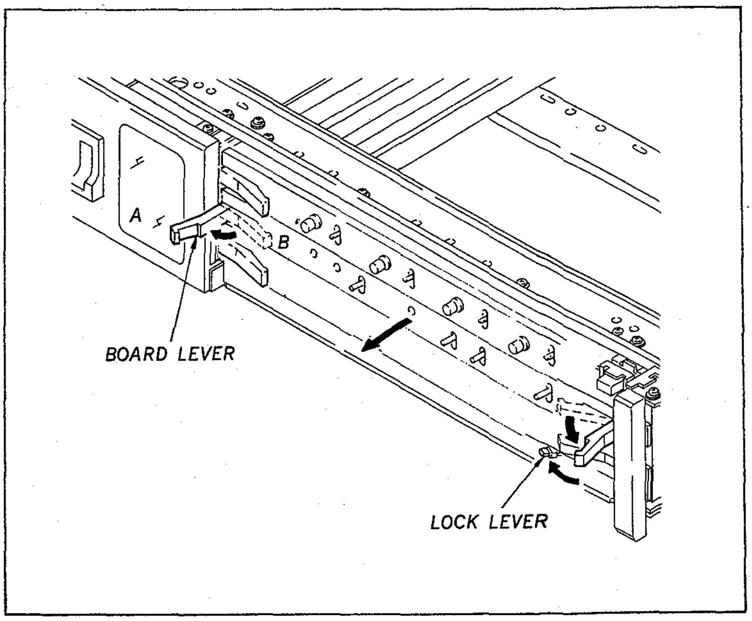
3-1-2. DAD-6/P, SEP-3/P and DEC-47/P Boards

Removal

- Move the lock lever in the direction of the arrow.
- Pull up the board levers in the direction of the arrows.
- Pull out the board.

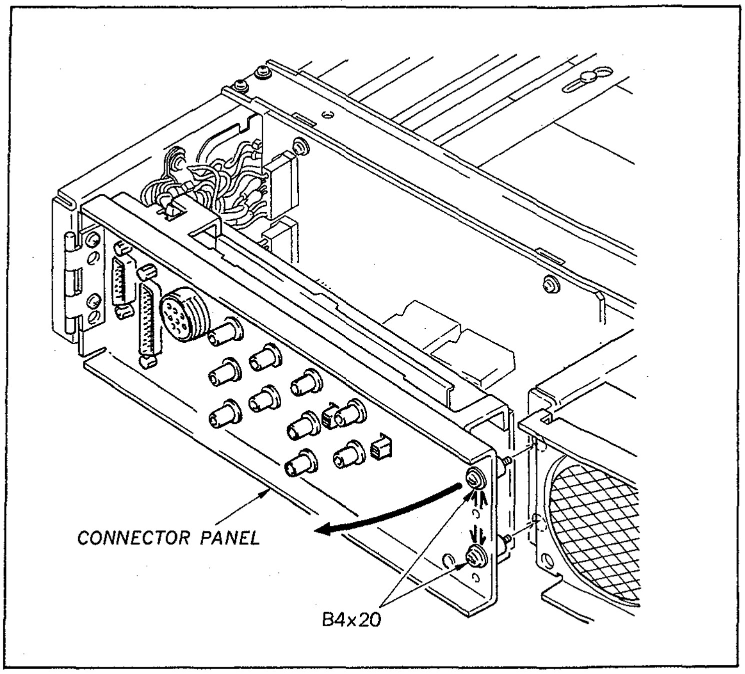
Installation

- Move the lock lever in the direction of the arrow.
- With the board levers in the A (extended) position insert the board until resistance is felt. Then moving the board levers into the B position push the board fully home.
- Move the lock lever in the opposite direction of the arrow.



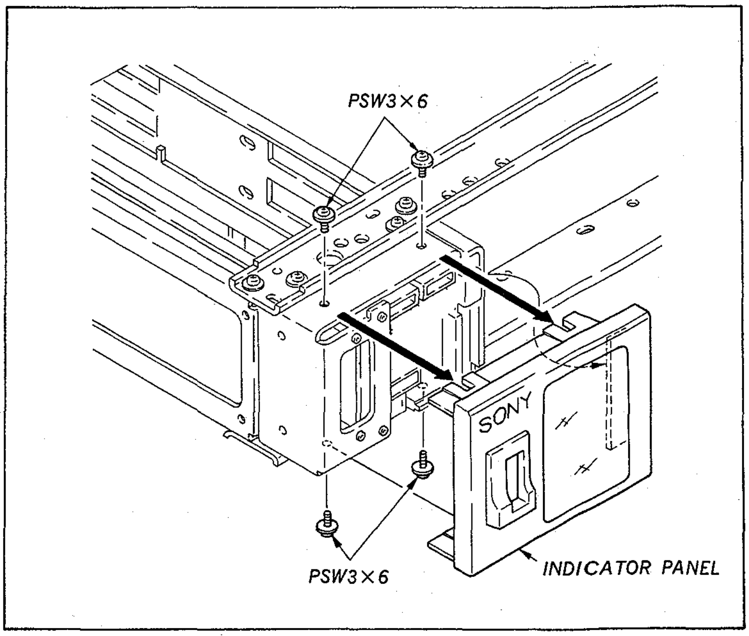
3-1-3. Connector Panel

- Remove the 2 fixing screws.
- Then the connector panel can be opened.


CONNECTOR PANEL
B4x20

3-1-4. Display Panel

- Remove the upper panel.(Refer to section 3-1-5.)
- Remove the bottom plate. (Refer to the section 3-1-5.)
- Remove the 4 fixing screws, then the display panel is removed.


PSW3×6
SONY
PSW3×6
INDICATOR PANEL

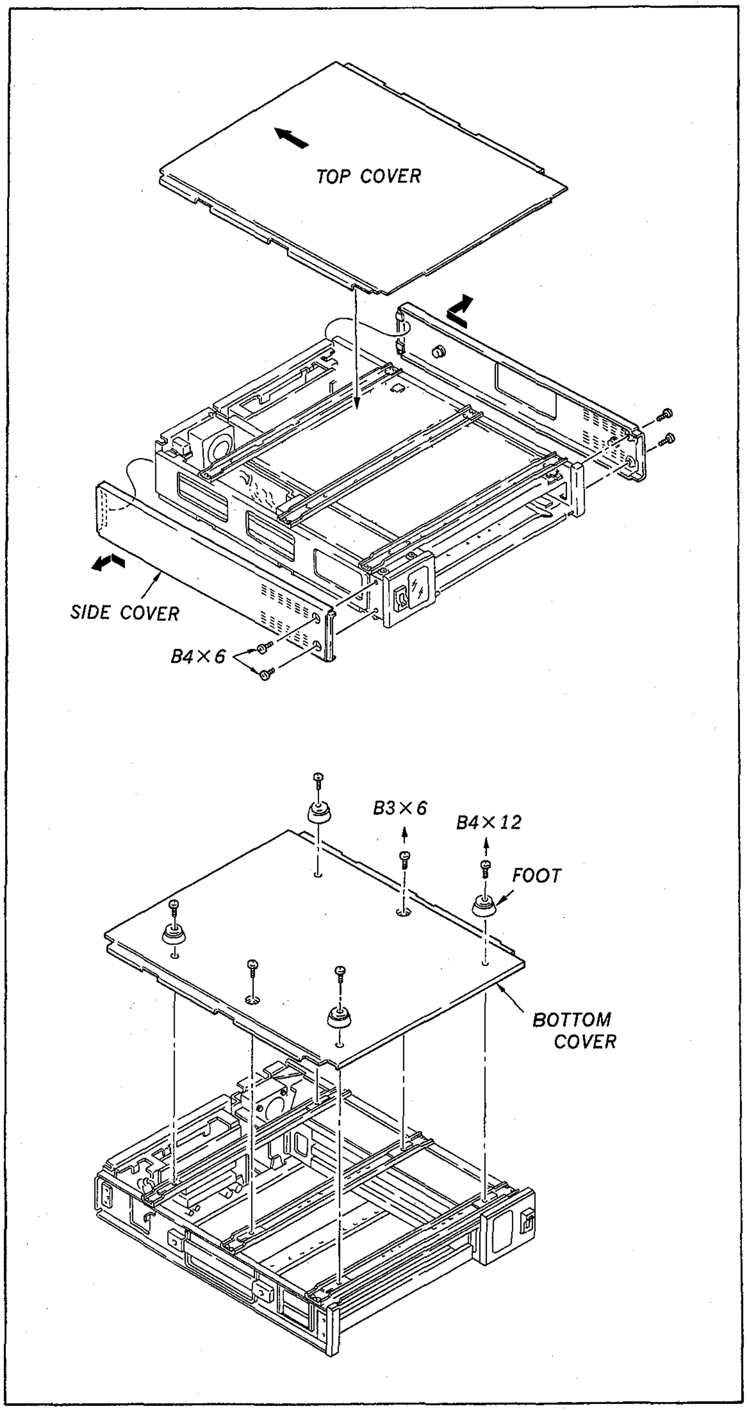
3-1-5. Side Covers, Top Cover and Bottom Cover

Side Covers, Top Cover

- Remove the 4 fixing screws shown in the figure. Then remove the panels in the directions of the arrows.

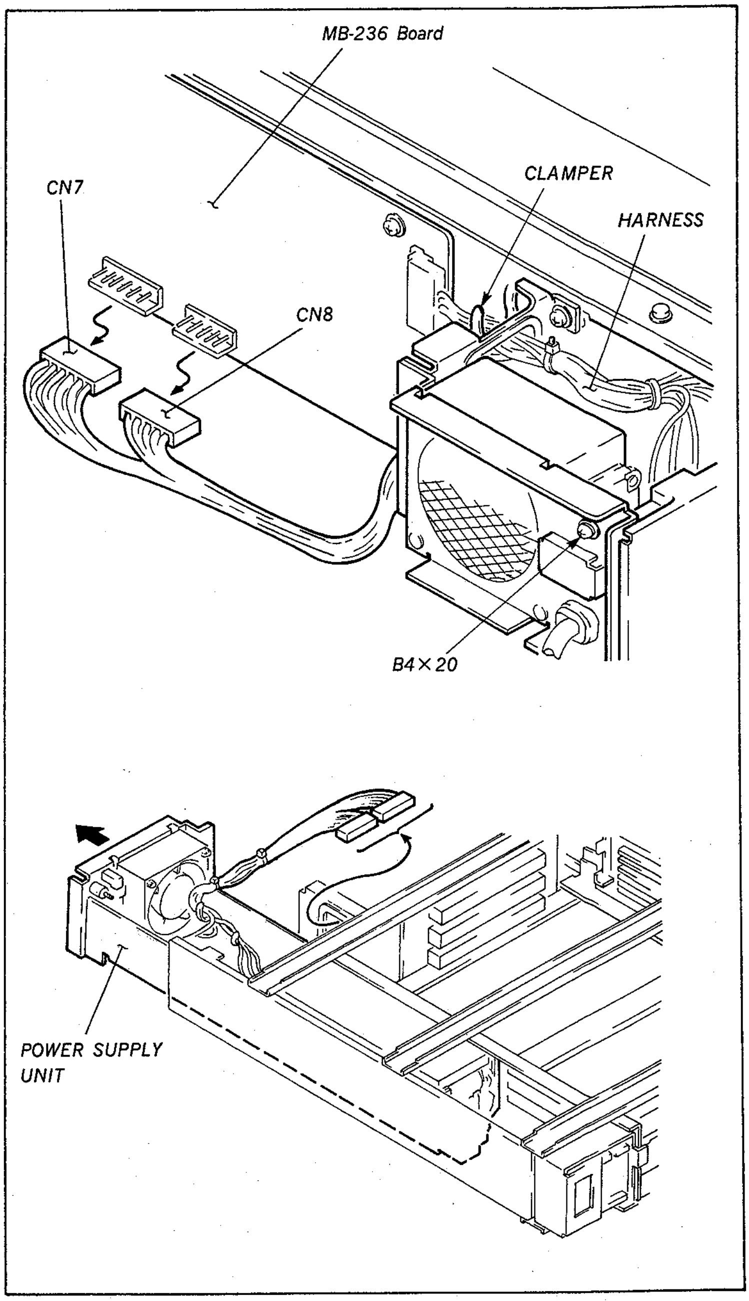
Bottom Cover

- Remove the 6 fixing screws shown in the figure.
- Then the 4 feet and the bottom plate can be removed.


TOP COVER
SIDE COVER
B4×6
B3×6
B4×12
FOOT
BOTTOM COVER

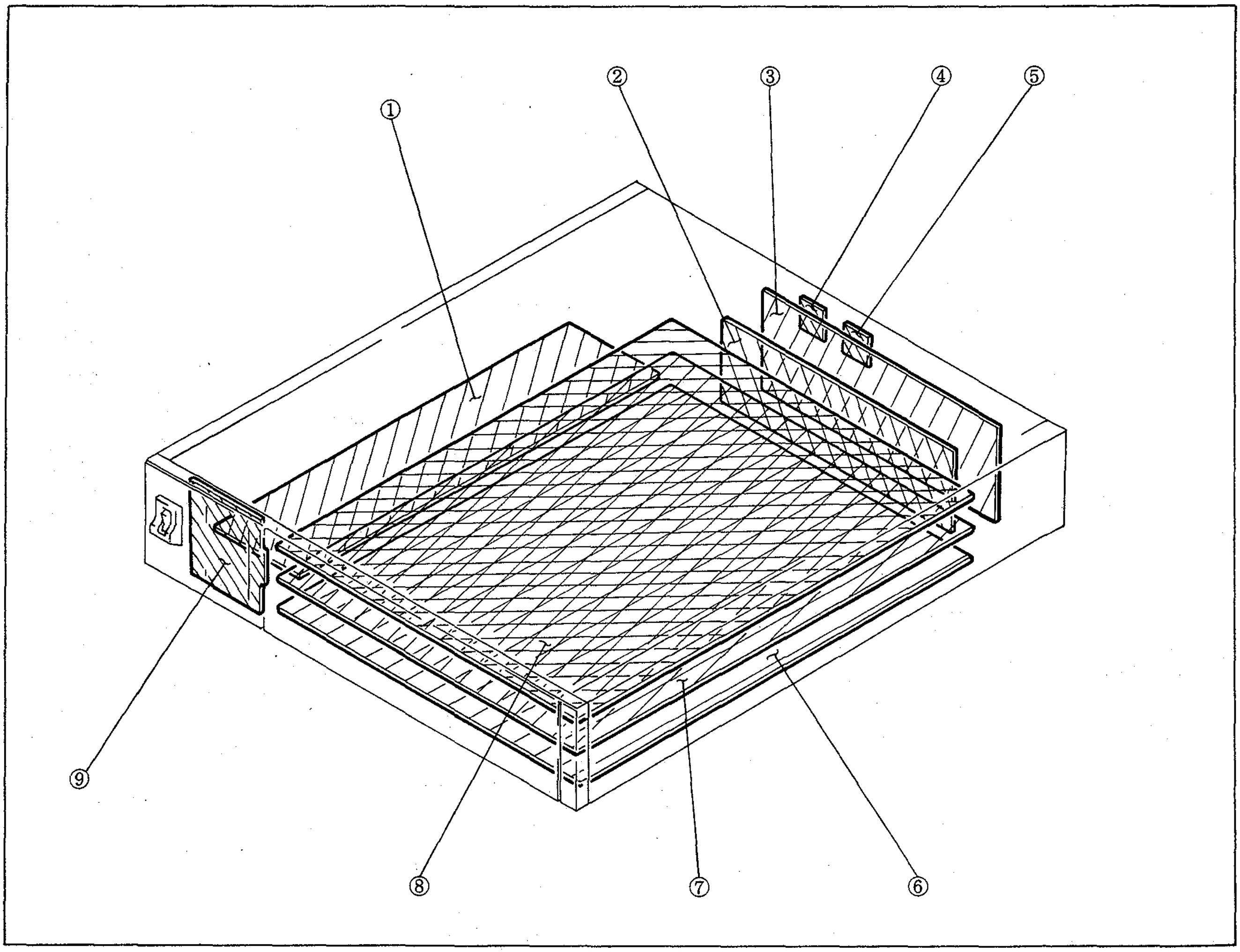
3-1-6. Power Supply Unit

- Open the connector panel. (Refer to the section 3-1-3.)
- Loosen the screw shown in the figure. (Be sure not to remove this screw. This screw has a stopper.)
- Disconnect the connectors CN7 and 8 shown in the figure.
- Loosen the clamper. Push the harness into the power supply unit.
- Pull out the power supply unit as shown in the figure.


MB-236 Board
CN7
CLAMPER
HARNESS
CN8
B4×20
POWER SUPPLY UNIT

3-2. LOCATIONS OF PRINTED CIRCUIT BOARDS

Locations of printed circuit boards in BVX-100/100P are shown in the figure.



① PS-195
② MB-236
③ VIO-14/P
VA-84
④ SW-283B
⑤ SW-283C
⑥ SEP-3/P
⑦ DEC-47/P
⑧ DAD-6/P
⑨ DSP-25

3-3. SELECT SWITCH SETTING

Along with the select switches on the front panel and the connector panel, the switches listed below are located on each board. These switches should be set according to operating conditions.

3-3-1. SEP-3 Board

- Function and Setting

S1, S20 : Test Switch
These switches are only for factory use. Be sure not to change the settings.
(When the unit is shipped, they are set to 3, 4side.)

S2 : Chroma Delay
Be sure not to change the setting.
(When the unit is shipped, it is set to position E.)

S4 : RGB/Y CR CB Select
This switch selects RGB or Y CR CB signal for BNC connectors.
(When the unit is shipped, it is set to position RGB.)

S5 : Band Width Limit Enable
This switch enables the BWLIMIT (Band Width Limit) signal which in freeze mode is used to limit the chrominance badnwidth. When the S5 (1) is set to OFF, normal operation is obtained.
(When the unit is shipped, only the S5 (1) is set to OFF.)

S6(1) :
FOR NTSC NTSC/PAL-M select :
This switch selects NTSC or PAL-M operation. When it is set to OFF, NTSC mode is selected. When it is set to ON, PAL-M mode is selected.
(When the unit is shipped, it is set to OFF.)
FOR PAL It is not in use.
Be sure not to change the setting.
(When the unit is shipped, it is set to OFF.)

S6(2) : 525/625 Select :
(When the unit is shipped, it is set to OFF.)

S6(3) : Bypass
(When the unit is shipped, it is set to ON.)

S6(4) : Field Comb
(When the unit is shipped, it is set to ON.)

S6(5) : Line Comb
(When the unit is shipped, it is set to ON.)

S7 : Bypass Delay

Be sure not to change the setting.

(When the unit is shipped, it is set to position 2.)

S8 : Y Delay

Be sure not to change the setting.

(When the unit is shipped, it is set to position 7.)

3-3-2. DEC-47 Board

- Function and Setting

S1,S3 : VISC Phase Adjust

This rotary switch allows discrete phase adjustment of the vertical insertion subcarrier. When S1 setting is changed by each one scale, the phase changes by 96°. Changing S3 setting by each one scale. the phase changes by 192°.

(When the unit is shipped, S1 is set to position 0.)

(When the unit is shipped, S3 is set to ON)

S2 : Hue Control LSB's

This rotary switch controls the lower byte of the hue control word. Set to 0 for normal operation.

(When the unit is shipped, it is set to position 0.)

S4 : Hue Control MSB's

This rotary switch controls the upper byte of the hue control word. Set to 0 for normal operation.

(When the unit is shipped, it is set to position 0.)

S5 : Color Framing Sequence Control (This is located on the control panel.)

During the BVX-100/100P is used as a frame synchronizer, set to ON to compensate for the color framing sequence of the output signal.

(When the unit is shipped, it is set to ON.)

S6 : Phase PRESET/MANUAL Select

When it is set to PRESET, an even video phase can be obtained regardless of the S14 and S16 settings. When it is set to MANUAL, S14 and S16 determine the Y/C phase.

(When the unit is shipped, it is set to MANUAL.)

S7(1) : Auto Freeze Enable

This switch enables the auto freeze function to operate in case of an input video failure.When it is set to OFF, auto freeze function is obtained.

(When the unit is shipped, it is set to OFF.)

S7(2) :

FOR NTSC It is not in use.

Be sure not to change the setting.

(When the unit is shipped, it is set to ON.)

FOR PAL PAL-D Filter select

This switch enables/disables the PAL-D filter. When it is Set to OFF, the PAL-D filter is available.

(When the unit is shipped, it is set to ON.)

S8(1)~(8) : Subcarrier Generator Control

These switches control the subcarrier generator phase lock loop control filter and should not be changed after calibration.

FOR NTSC

(When the unit is shipped, only the S8 (2) is set to OFF.)

FOR PAL

(When the unit is shipped, S8 (2), (6) and (7) are set to OFF.)

3-3-3. DAD-6 Board

- Function and Setting

S1(1)~(8), S2(1)~(8) : Vertical Blanking Control Switch

These switches control the blanking of individual lines in the vertical blanking period.

(When the unit is shipped, S1 (1 thru. 8) and S2 (1 thru. 8) are all set to ON.)

S3 (1) :

FOR NTSC ONLY 20 Line /21Line V Blanking Select

When it is set ON, V blanking selects the 20 line. Set to OFF for 21.

(When the unit is sthipped, it is set to ON.)

S3 (2) :

FOR NTSC ONLY Half Line Masking

This switch enables/disables the masking of half -line. When it is set to ON, half line masking is performed. When it is set to OFF, half line masking is not performed.

(When the unit is shipped, it is set to ON.)

3-4. SPARE PARTS

(1) The shaded and ⚠ -marked components are *critical to safety.*
Replace only with same components as specified.

(2) Replacement Parts supplied from the Sony Parts Center will sometimes have a different shape from the original parts. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts".
This manual's exploded views and electrical spare parts list indicate the part numbers of "the standardized genuine parts at the present". Regarding engineering part changes in out engineering department, refer to Sony service bulletins and service manual supplements.

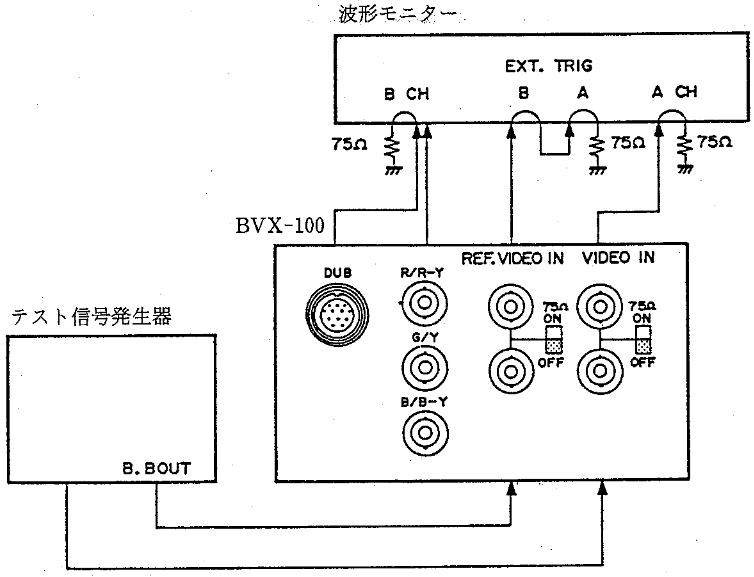
(3) The parts marked with "s" in the SP column of the exploded views and electrical spare parts list *are normally stocked for replacement* purposes. The parts marked with "o" in the SP column *are not normally* required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.

第4章
電気調整要項

〔必要な機器〕

- 2現象オシロスコープ
- テスト信号発生器：テクトロニクス1410または同等品
- 波形モニター：テクトロニクス1485Rまたは同等品
- デジタル電圧計
- 周波数カウンター

〔接続〕


波形モニター
EXT. TRIG
B CH
B
A
A CH
75Ω
75Ω
75Ω
BVX-100
DUB
R/R-Y
G/Y
B/B-Y
REF. VIDEO IN
VIDEO IN
75Ω ON
OFF
75Ω ON
OFF
テスト信号発生器
B. BOUT

テスト信号発生器
- B.B OUT コネクターと REF. VIDEO IN コネクターを接続します。
  (75Ω 終端スイッチは OFF)
  調整に必要な信号を VIDEO IN コネクターに入力します。
  (75Ω ターミネートスイッチは OFF)

波形モニター
- A-CH と VIDEO IN コネクターを接続します。
  (A-CH は75Ω 終端します。)
- B-CH と R/R-Y, G/Y, B/B-Y もしくは DUB コネクターを接続します。(B-CH は75Ω 終端します。)
- EXT.TRIG. と REF.VIDEO IN コネクターを図に示すように接続します (75Ω ターミネートスイッチは OFF)

スイッチの設定 (フロントパネル)
<DEMODULATOR>
Y/C DELAY MANUAL/PRESET ……………………………PRESET
FREEZE ON/OFF ……………………………OFF
FREEZE FRAME/FIELD ……………………………FRAME
LOCAL/REMOTE ……………………………LOCAL
<ANALOG PROC>
INPUT LEVEL MANUAL/PRESET ……………………………PRESET
CHROMA GAIN MANUAL/PRESET ……………………………PRESET
SYNC PHASE MANUAL/PRESET ……………………………PRESET
BLACK LEVEL MANUAL/OFF/PRESET ……………………………PRESET

4-1．DAD-6/P 基板調整要項

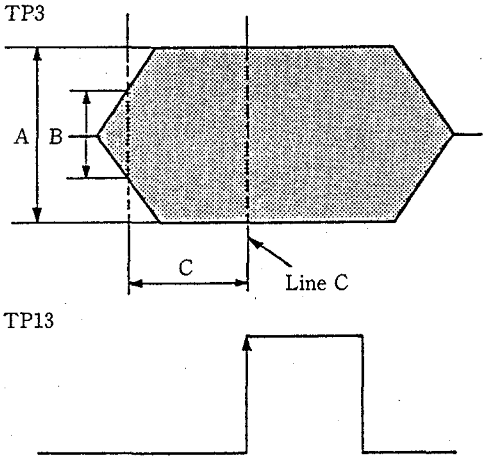
4-1-1．A/D コンバータ Vcc A，V RB レベル調整

調整時の状態	規格	調整箇所
	TP48/DAD-6（L-17） 5.0±0.02Vdc	⊘ RV17/DAD-6（C-20）
	TP49/DAD-6（D-21） 3.0±0.02Vdc	⊘ RV16/DAD-6（E-13）

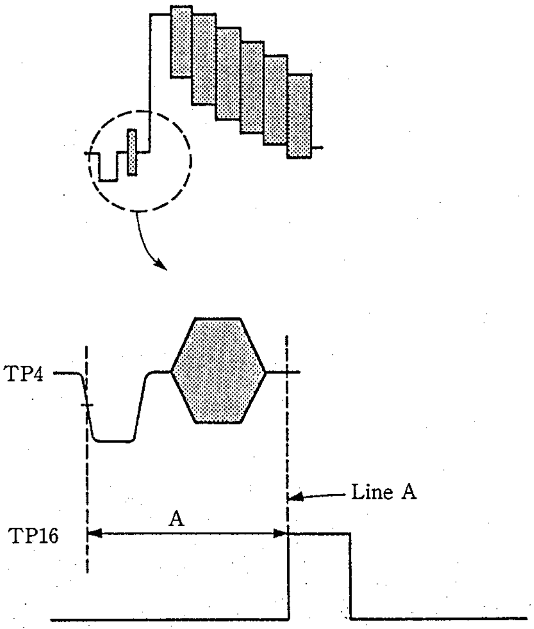
4-1-2．D/A コンバータ Vcc A，V REF レベル調整

調整時の状態	規格	調整箇所
	TP56/DAD-6（J-25） 5.0±0.02Vdc	⊘ RV47/DAD-6（H-22）
	TP59/DAD-6（K-27） 3.8±0.02Vdc	⊘ RV41/DAD-6（K-26）

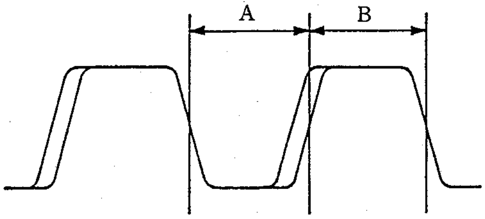
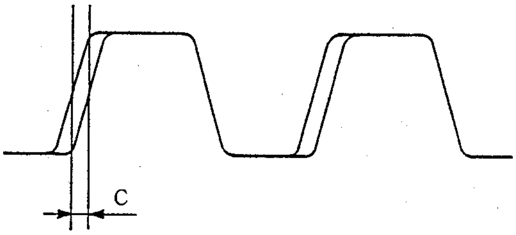
4-1-3. Write系アナログクランプ位置調整

調整時の状態	規格	調整箇所
• 100%カラーバー信号(セットアップなし)をVIDEO INコネクターに入力します。 • オシロスコープ設定： レンジ CH-1=1V DIV. CH-2=2V DIV. 10μ/DIV. ディレー0.1μ/DIV.	オシロスコープ CH-1：TP3/DAD-6 (B-9) CH-2：TP13/DAD-6 (D-11)  A=1±0.1μsec $B=\frac{A}{2}$ C=1μsec TP13の波形の立ち上りがline Cの一直線上にあること。	⊘ RV21/DAD-6 (E-13) TRIG：CH-1/TV-H モード

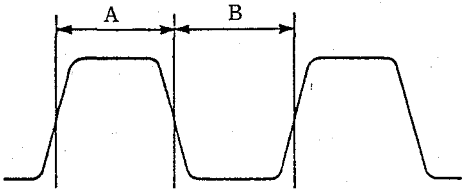
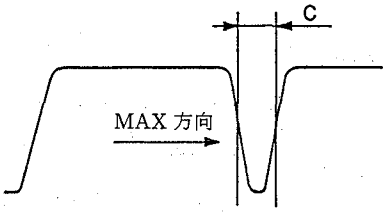
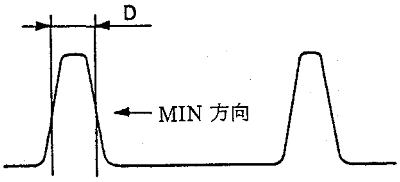
4-1-4. Write系デジタルクランプ位置調整

調整時の状態	規　格	調整箇所
・100%カラーバー信号（セットアップなし）をVIDEO INコネクターに入力します。 ・オシロスコープ設定： レンジ　CH-1=1V DIV. CH-2=2V DIV. 10μ/DIV. ディレー0.1μ/DIV.	オシロスコープ CH-1：TP4/DAD-6（A-14） CH-2：TP16/DAD-6（E-13）  A=8.3±0.05μsec TP16の波形の立ち上がりがline Aの一直線上にあること。	⊘ RV24/DAD-6（E-13） TRIG：CH-1/TV-H モード

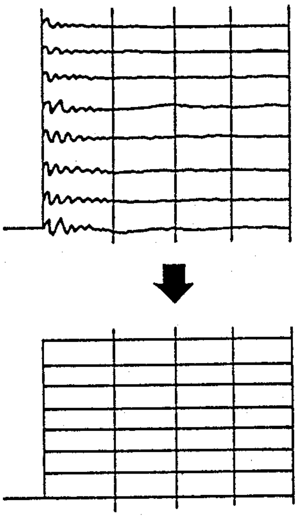
4-1-5. クロマCK調整1

調整時の状態	規格	調整箇所
・100%カラーバー信号をVIDEO IN コネクターに入力します。 ・オシロスコープ設定： レンジ 1V/DIV. 1μ/DIV. タイム 50nsec/DIV. ・Y/C DELAY MANUAL/PRESET スイッチ（フロントパネル上）をMANUALに設定します。	オシロスコープ CH-1：TP57/DAD-6（H-20）  A＝B	⊘ Y/Cディレーつまみ/フロントパネル
調整完了後 ・Y/C DELAY MANUAL/PRESET を PRESET に戻します。	 Cを最小にする （C≦2nsec）	⊘ RV34/DAD-6（G-21） TRIG：CH-1/AC モード

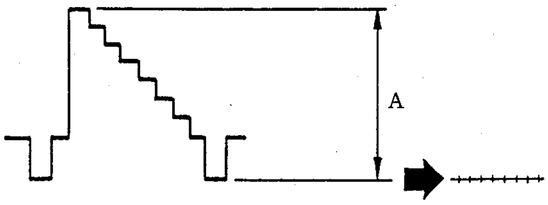
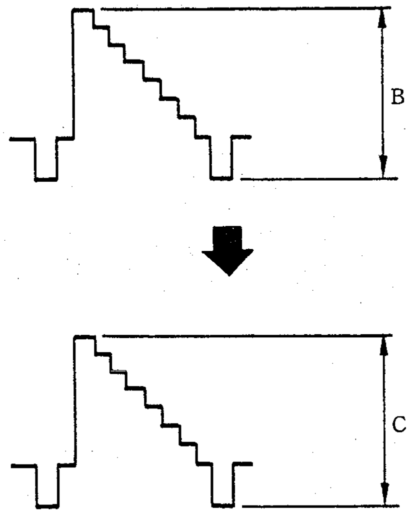
4-1-6．クロマCK調整2

調整時の状態	規格	調整箇所
ステップ 1 • 100%カラーバー信号をVIDEO INコネクターに入力します。 • オシロスコープ設定 レンジ 1V/DIV. 1μ/DIV. タイム 50nsec/DIV.	オシロスコープ CH-1：TP57/DAD-6（H-20）  A＝B	⊘ RV56/DAD-6（G-23）
ステップ 2 • Y/C DELAY MANUAL/PRESETスイッチ（フロントパネル上）をMANUALに設定します。 • フロントパネル上のY/C DELAY FINEつまみ（フロントパネル上）を時計方向一杯に回します。	 C＝32±1nsec	⊘ RV55/DAD-6（G-24）
ステップ 3 • Y/C DELAY FINEつまみを反時計方向一杯に回します。 • ステップ2とステップ3を規格が同時に満足するまで繰り返します。 調整完了後 • YC DELAY FINEつまみをメカニカルセンターにします。 • Y/C DELAY MANUAL/PRESETスイッチをPRESETに設定します。	 D＝32±1nsec	⊘ RV56/DAD-6（G-23） TRIG：CH-1/ACモード

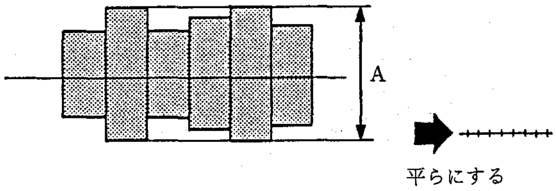
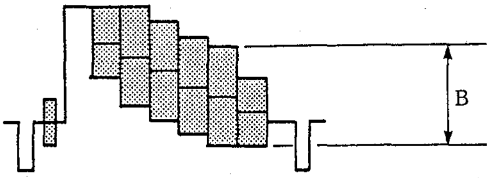
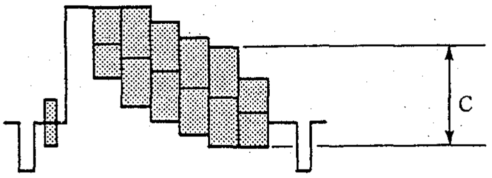
4-1-7.　DC オフセット調整

調整時の状態	規格	調整箇所
• 75%カラーバー信号(クロマオフ)をVIDEO IN コネクターに入力します。 • オシロスコープ設定 レンジ　0.2V/DIV.	オシロスコープ設定 CH-1：TP5/DAD-6 (B-14)  平らにする	⊘ RV5/DAD-6 (C-3) TRIG：CH-1/TV-V モード

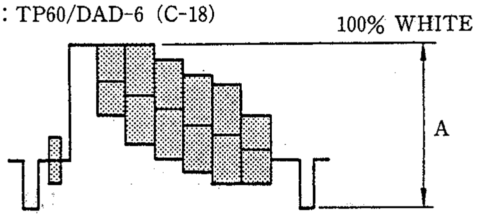
4-1-8. VIDEOゲインバランス調整

調整時の状態	規格	調整箇所
ステップ 1 ・100%カラーバー信号（クロマオフ）をVIDEO INコネクターに入力します。	オシロスコープ CH-1：TP51/DAD-6（A-1）  Aを最小にする。	⊘ RV12/DAD-6（A-18）
ステップ 2	CH-1：TP1/DAD-6（A-5） 	
ステップ 3 ・VIDEO LEVEL MANUAL/PRESETスイッチ（フロントパネル上）をMANUALに設定します。 ・VIDEO LEVELつまみ（フロントパネル上）を時計方向一杯に回します。 調整完了後 ・VIDEO LEVEL MANUAL/PRESETスイッチをPRESETに設定します。 ・VIDEO LEVELつまみをメカニカルセンターにします。	C=1.48B	⊘ RV3/DAD-6（B-3） TRIG：CH-1/TV-Hモード

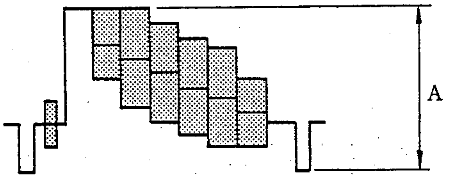
4-1-9. クロマゲインバランス調整

調整時の状態	規格	調整箇所
ステップ 1 ・100%カラーバー信号を VIDEO IN コネクターに入力します。	オシロスコープ CH-1：TP50/DAD-6（A-7）  A を最小にする	⊘ RV7/DAD-6（A-9）
ステップ 2	CH-1：TP3/DAD-6（B-9） 	
ステップ 3 ・CHROMA GAIN MANUAL/PRESET スイッチ（フロントパネル上）を MANUAL に設定します。 ・CHROMA GAIN つまみ（フロントパネル上）を時計方向一杯に回します。 調整完了後 ・CHROMA GAIN MANUAL/PRESET スイッチを PRESET に設定します。 ・CHROMA GAIN つまみをメカニカルセンターに設定します。	 C=1.48B	⊘ RV8/DAD-6（A-8） TRIG：CH-1/TV-H モード

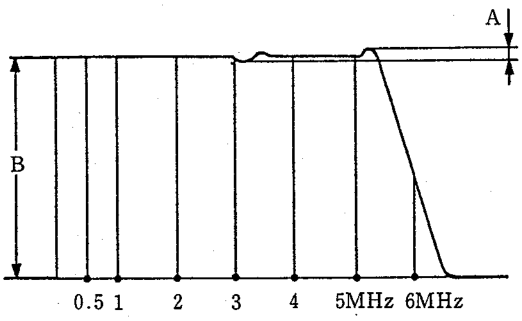
4-1-10. A/D入力レベル調整

調整時の状態	規格	調整箇所
•100%カラーバー信号をVIDEO INコネクターに入力します。	オシロスコープ CH-1：TP60/DAD-6 (C-18)  A=1.53±0.005 Vp-p	⊘ RV4/DAD-6 (A-4) TRIG：CH-1/TV-H モード

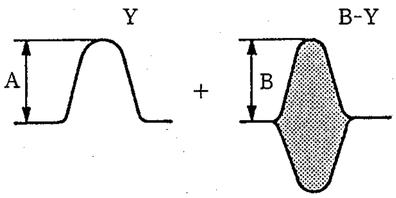
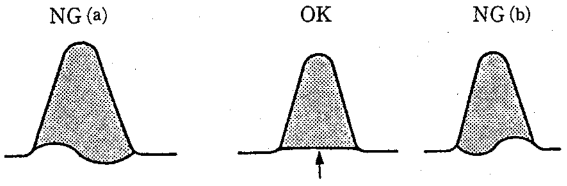
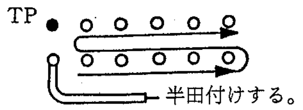
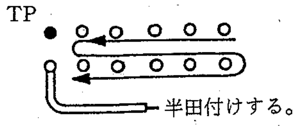
4-1-11. MONITOR OUT レベル調整

調整時の状態	規格	調整箇所
•100%カラーバー信号をVIDEO INコネクターに入力します。	波形モニター CH-1：MONITOR OUTコネクター/リアパネル  A=1.0±0.01Vp-p	⊘ RV10/DAD-6 (B-14) TRIG：EXIT

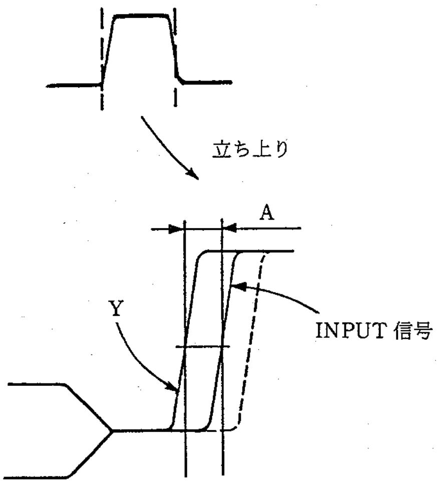
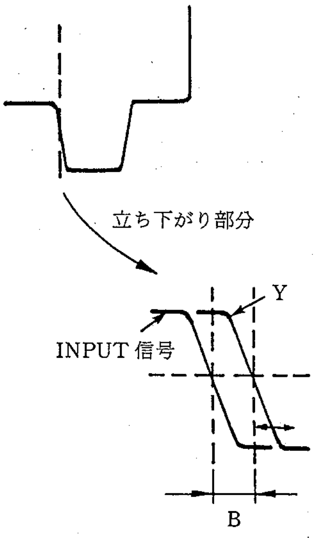
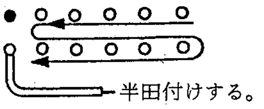
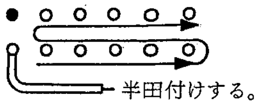
4-1-12. MONITOR OUT 周波数特性調整

調整時の状態	規格	調整箇所
•Vスイープ信号(～6MHz)をVIDEO INコネクターに入力します。	波形モニター CH-1：MONITOR OUT コネクター／リヤパネル  Aを最小にする (A≦0.02B)	⊘ RV53/DAD-6 (B-5) ⊘ RV54/DAD-6 (A-4) ⊘ CV1/DAD-6 (B-4) TRIG：EXIT

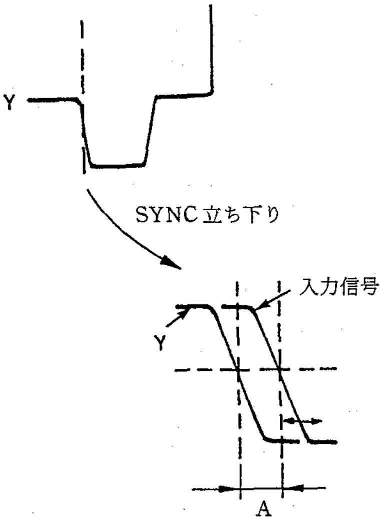
4-1-13.　Y/C遅延調整

調整時の状態	規格	調整箇所
・RGB/YCR　CBスイッチS4/SEP-3 (D-17) をY CR CBに設定します。 ・パルス&バー信号をVIDEO INコネクターに入力します。	オシロスコープ CH-1：G/Y コネクター／リヤパネル CH-2：B/B-Y コネクター／リヤパネル  A=B	
・YとR-Yを加えます。 調整完了後 ・RGB/Y CR CBスイッチをRGBに設定します。	 Yが進んでいる。　平らにする　Yが遅れている。	⊘ DL-2/DAD-6 (J-16) (a)のとき  Yを遅らせる。 (b)のとき  Yを進ませる。 TRIG：TV-H モード

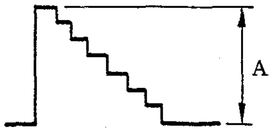
4-1-14. ビデオ位相位置調整

調整時の状態	規格	調整箇所
ステップ 1 ・カラーフレームシーケンスコントロールスイッチ S5/DEC-47 (E-9) を OFF にします。 ・RGB/Y CR CB スイッチ S4/SEP-3 (D-17) を Y CR CB に設定します。 ・100%カラーバー信号を VIDEO IN コネクターに入力します。 ・100%カラーバー信号をオシロスコープの CH-2に入力します。 ・SYNC PHASE MANUAL/PRESET スイッチを MANUAL に設定します。	オシロスコープ：G/Y コネクター／リヤパネル 	⊘ SYNC PHASE つまみ/フロントパネル
ステップ 2 ・カラーフレームシーケンスコントロールスイッチ S5/DEC-47 (E-9) を ON に戻します。 調整完了後 ・SYNC PHASE MANUAL/PRESET スイッチを PRESET に戻します。 ・RGB/Y CR CB スイッチを RGB に戻します。	 B を最小にする (B≦7nsec) B を最小にする (B≦7nsec)	⊘ DL-3/DAD-6 (K-12)  Y を進ませる。  Y を遅らせる。 TRIG：TV-H モード

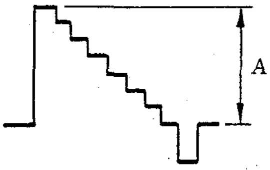
4-1-15. Sync 位相プリセット調整

調整時の状態	規格	調整箇所
・RGB/Y CR CB スイッチ S4/SEP-3（D-17）を Y CR CB に設定します。 ・100%カラーバー信号をオシロスコープの CH-2に入力します。 調整完了後 ・RGB/Y CR CB スイッチ S4/SEP-3（D-17）を RGB に戻します。	オシロスコープ CH-1：G/Y コネクター／リヤパネル  A＝0±1nsec	⊘ RV20/DAD-6（A-6） TRIG：CH-2/TV-H モード

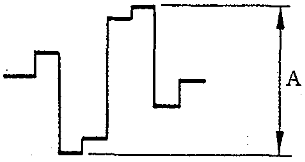
4-1-16. Y レベル調整

調整時の状態	規格	調整箇所
・100%カラーバー信号を VIDEO IN コネクターに入力します	オシロスコープ CH-1：TP32/DAD-6（J-13）  A＝0.5±0.01Vp-p	⊘ RV36/DAD-6（J-14） TRIG：TV-H モード

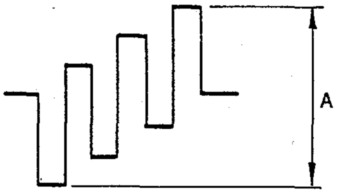
4-1-17. DUB Yレベル調整

調整時の状態	規格	調整箇所
・100%カラーバー信号をVIDEO INコネクターに入力します。 ・100%カラーバー信号をオシロスコープのCH-2にも入力します。	オシロスコープ CH-1：TP61/DAD-6 (K-14)  A=1.1±0.01Vp-p	⊘ RV42/DAD-6 (K-14) TRIG：CH-2/TV-H モード

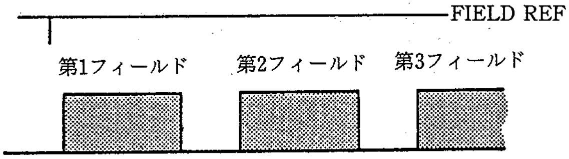
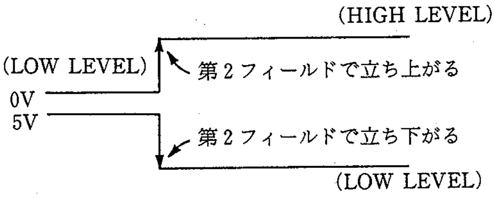
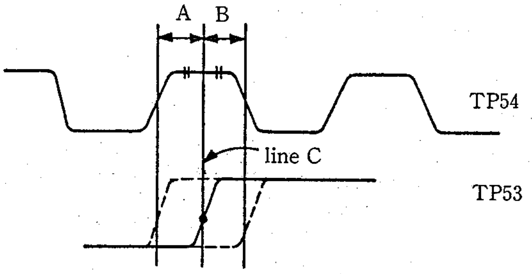
4-1-18. R-Yレベル調整

調整時の状態	規格	調整箇所
・100%カラーバー信号（セットアップなし）をVIDEO INコネクターに入力します。 ・100%カラーバー信号をオシロスコープのCH-2にも入力します。	オシロスコープ CH-1：TP46/DAD-6 (L-17)  A=0.5±0.01Vp-p	⊘ RV46/DAD-6 (L-17) TRIG：CH-2/TV-H モード

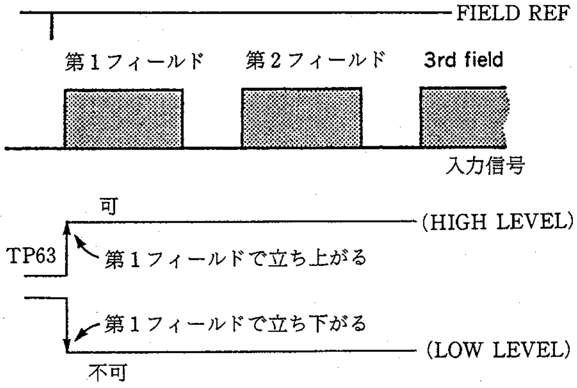
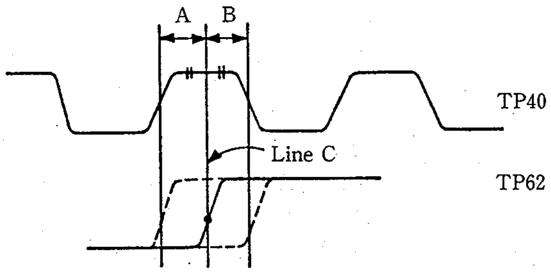
4-1-19. B-Yレベル調整

調整時の状態	規格	調整箇所
・100%カラーバー信号（セットアップなし）をVIDEO INコネクターに入力します。 ・100%カラーバー信号（セットアップなし）をオシロスコープのCH-2に入力します。	オシロスコープ CH-1：TP34/DAD-6 (K-17)  A=0.5±0.01Vp-p	⊘ RV40/DAD-6 (K-17) TRIG：CH-2/TV-H モード

4-1-20. NTSC W FST フィールド調整

調整時の状態	規格	調整箇所
ステップ 1 • 信号発生器の FILELD REF. をオシロスコープの CH-1に接続します。 • 100%カラーバー信号をオシロスコープの CH-3に接続します。	オシロスコープ CH-2：TP52/DAD-6 (C-26)  FIELD REF 第1フィールド 第2フィールド 第3フィールド  (HIGH LEVEL) (LOW LEVEL) 第 2 フィールドで立ち上がる 0V 5V 第 2 フィールドで立ち下がる (LOW LEVEL) 不可	⊘ RV18/DAD-6 (B-26)
ステップ 2 • 100%カラーバー信号を VIDEO IN コネクターに接続します。	CH-1：TP54/DAD-6 (B-25) CH-2：TP53/DAD-6 (B-25)  A B TP54 line C TP53 A＝B TP53の波形の立ち上がりの中心を line C とそろえる。	TRIG：TV-H モード

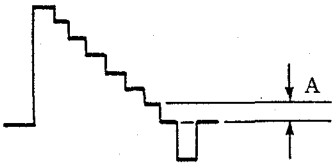
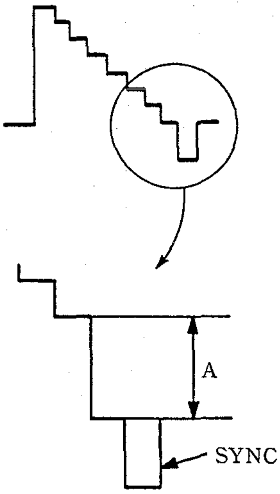
4-1-21. NTSC カラーフレーム信号調整

調整時の状態	規格	調整箇所
ステップ 1 ・信号発生器の FILELD REF. をオシロスコープの CH-1に接続します。 ・100%カラーバー信号をオシロスコープの CH-3に接続します。	オシロスコープ CH-2：TP63/DAD-6 (G-7)  FIELD REF 第1フィールド 第2フィールド 3rd field 入力信号 可 (HIGH LEVEL) TP63 第1フィールドで立ち上がる 第1フィールドで立ち下がる (LOW LEVEL) 不可	⊘ RV30/DAD-6 (G-13)
ステップ 2 ・100%カラーバー信号を VIDEO IN コネクターに接続します。	CH-1：TP40/DAD-6 (L-12) CH-2：TP62/DAD-6 (H-8)  A B TP40 Line C TP62 A＝B TP62の波形の立ち上がりの中心を line C とそろえます。	TRIG：TV-H モード

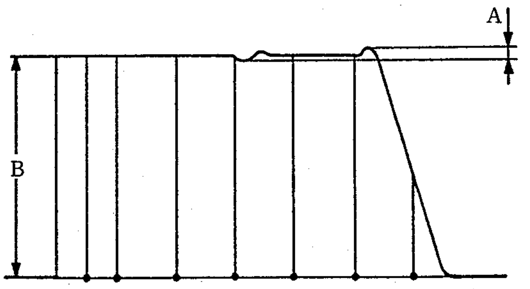
4-1-22. NTSC INT ロック調整

調整時の状態	規格	調整箇所
・100%カラーバー信号を VIDEO IN コネクターに入力します。 ・B. B. OUT を REF. VIDEO IN コネクターから外します。	周波数カウンター CH-20：TP40/DAD-6 (L-12) 3579545±10Hz	⊘ RV38/DAD-6 (K-18)

4-1-23. セットアップ調整

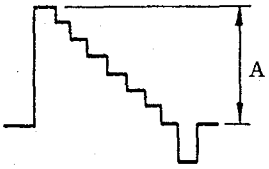
調整時の状態	規格	調整箇所
ステップ 1 ・75%カラーバー信号 (7.5%セットアップ) を VIDEO IN コネクターに入力します。 ・RGB/Y CR CB スイッチ S4/SEP-3 (D-17) を Y CR CB に設定します。 ・BLACK LEVEL MANUAL/OFF/PRESET スイッチを MANUAL に設定します。 ・RV15/DAD-6 (C-17) を反時計方向一杯に回します。	波形モニター CH-1：DUB コネクター/リヤパネル  A＝54±1mV	⊘ RV12/DAD-6 (A-18)
ステップ 2 ・BLACK LEVEL つまみを時計方向一杯に回します。 調整完了後 ・BLACK LEVEL スイッチを PRESET に戻します。 ・RGB/Y CR CB スイッチを RGB に戻します。	 A＝165±3mV	⊘ RV15/DAD-16 (C-17) TRIG：TV-H モード

4-1-24. Y 周波数特性調整

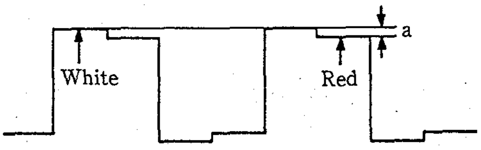
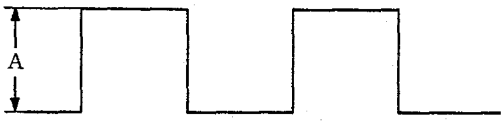
調整時の状態	規格	調整箇所
• RGB/Y CR CB スイッチ S4/SEP-3 (D-17) を Y CR CB に設定します。 • V スイープ信号を VIDEO IN コネクターに入力します。 調整完了後 • RGB/Y CR CB スイッチを RGB に設定して下さい。	波形モニター CH-1：G/Y コネクター／リヤパネル 	⊘ RV35/DAD-6 (J-14) TRIG：TV-H モード

4-2. VIO-14基板調整

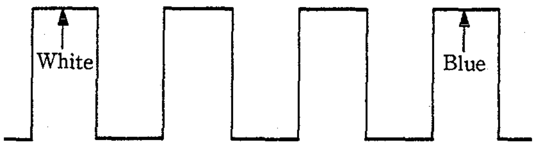
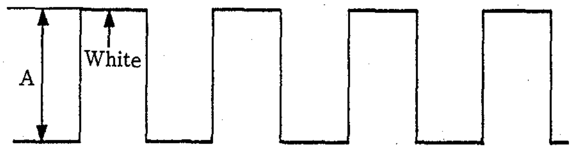
4-2-1. Y入力レベル調整

調 整 時 の 状 態	規　　　格	調 整 箇 所
・100%カラーバー信号をVIDEO IN コネクターに入力します。	オシロスコープ TP11/VIO-14 (A-24)  A=1.1±0.01Vp-p	⊘ RV2/VIO-14 (H-1) TRIG: TV-H モード

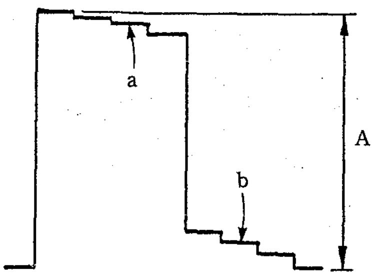
4-2-2. Red 調整

調 整 時 の 状 態	規　　　格	調 整 箇 所
ステップ 1 ・100%カラーバー信号 (set-up なし) をVIDEO IN コネクターに入力します。 ・R部分をW部分に合わせ一直線上にそろえます。	波形モニター CH-1：R/R-Y コネクター／リヤパネル ステップ1  aを最小にする	⊘ RV1/VIO-14 (H-1)
ステップ 2	ステップ2  A=0.7±0.01Vp-p	⊘ RV9/VIO-14 (E-1) TRIG: TV-H モード

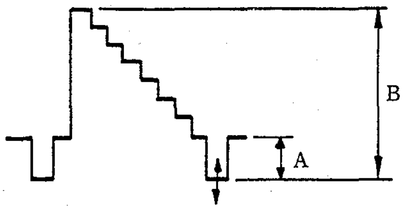
4-2-3.　Blue 調整

調整時の状態	規格	調整箇所
ステップ 1 ・100%カラーバー信号（set-up なし）をVIDEO IN コネクターに入力します。	波形モニター CH-1：B/B-Y コネクター/リヤパネル  B 部分を W 部分にあわせ直線上にそろえます。	⊘ RV3/VIO-14 (H-1)
ステップ 2	 A＝0.7±0.01Vp-p	⊘ RV12/VIO-14 (E-1) TRIG：TV-H モード

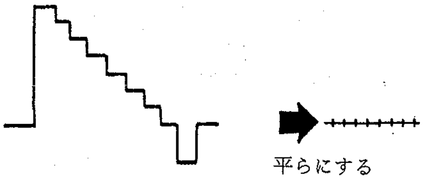
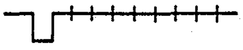
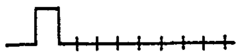
4-2-4.　Green 調整

調整時の状態	規格	調整箇所
ステップ 1 ・100%カラーバー信号（set-up なし）をVIDEO IN コネクターに入力します。	波形モニター CH-1：G/Y コネクター／リヤパネル  a 部分を b 部分に合わせ一直線上にそろえます。	⊘ RV4/VIO-14 (G-1)
ステップ 2	A＝0.7±0.01Vp-p	⊘ RV9/VIO-14 (E-1) TRIG：TV-H モード

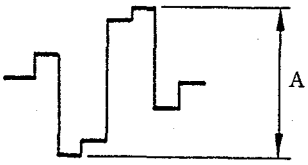
4-2-5. Y出力レベル調整

調整時の状態	規格	調整箇所
・RGB/Y CR CB スイッチ S4/SEP-3 基板（D-17）を Y CR CB に設定します。 ・100%カラーバー信号（クロマ OFF）を波形モニターの CH-A に入力します。 調整完了後 ・RGB/Y CR CB スイッチ S4を RGB に戻します。	波形モニター CH-B：G/Y コネクター／リヤパネル  A（SYNC レベル）=0.286±0.005Vp-p B（Y レベル）=1.0±0.005Vp-p	Y レベル ⊘ RV16/VIO-14（C-1） Sync レベル： ⊘ RV6/VIO-14（F-1） TRIG：TV-H モード

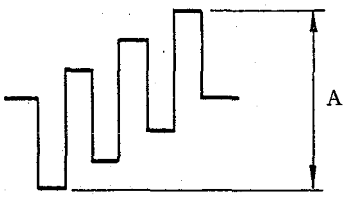
4-2-6. DUB Y レベル調整

調整時の状態	規格	調整箇所
ステップ 1 ・RGB/Y CR CB スイッチ S4/SEP-3（D-17）を Y CR CB に設定します。 ・100%カラーバー信号（クロマオフ）を波形モニターの CH-A に入力します。	波形モニター CH-B：DUB コネクター／リヤパネル 	⊘ RV13/VIO-14（E-2）
ステップ 2 ・ステップ1にて調整できない場合のみステップ2を行って下さい。 調整完了後 ・RGB/Y CR CB スイッチを RGB に戻します。	 RV42を時計方向へ回す RV13を反時計方向へ回す  RV42を反時計方向へ回す RV13を時計方向へ回す	⊘ RV42/DAD-16（K-14） ⊘ RV13/VIO-14（E-2） TRIG：TV-H モード

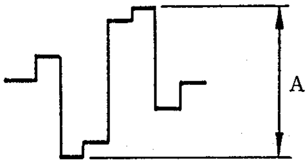
4-2-7.　R-Yレベル調整

調整時の状態	規格	調整箇所
・RGB/Y CR CBスイッチS4/SEP-3（D-17）をY CR CBに設定します。 ・75%カラーバー信号（7.5%セットアップ）をVIDEO INコネクターに入力します。 調整完了後 ・RGB/Y CR CBスイッチをRGBに設定します。	波形モニター CH-1：R/R-Yコネクター／リヤパネル  A＝0.7±0.01Vp-p	⊘ RV14/VIO-14（C-1） TRIG：TV-Hモード

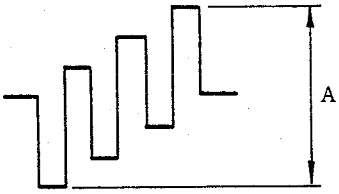
4-2-8.　B-Yレベル調整

調整時の状態	規格	調整箇所
・RGB/Y CR CBスイッチS4/SEP-3（D-17）をY CR CBに設定します。 ・75%カラーバー信号（7.5%セットアップ）をVIDEO INコネクターに入力します。 調整完了後 ・RGB/Y CR CBスイッチをRGBに戻します。	波形モニター CH-1：B/B Yコネクター／リヤパネル  A＝0.7±0.01Vp-p	⊘ RV17/VIO-14（C-2） TRIG：TV-Hモード

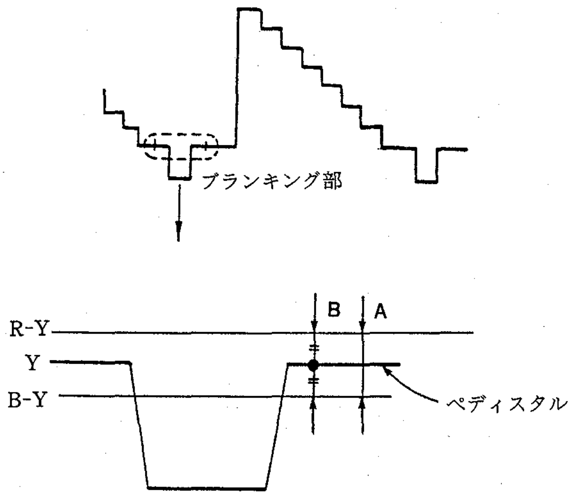
4-2-9.　DUB R-Y レベル調整

調　整　時　の　状　態	規　　　　格	調　整　箇　所
• RGB/Y CR CB スイッチ S4/SEP-3（D-17）を Y CR CB に設定します。 • 100%カラーバー信号（7.5%セットアップ）を VIDEO IN コネクターに入力します。 調整完了後 • RGB/Y CR CB スイッチを RGB に戻します。	波形モニター CH-1：DUB コネクター／リヤパネル  A＝0.7±0.01Vp-p	⊘ RV15/VIO-14（C-1） TRIG：TV-H モード

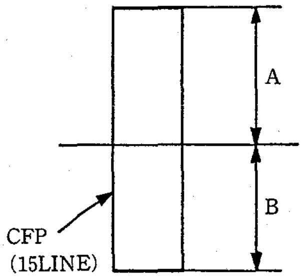
4-2-10.　DUB B-Y レベル調整

調　整　時　の　状　態	規　　　　格	調　整　箇　所
• RGB/Y CR CB スイッチ S4/SEP-3（D-17）を Y CR CB に設定します。 • 100%カラーバー信号（7.5%セットアップ）を VIDEO IN コネクターに入力します。 調整完了後 • RGB/Y CR CB スイッチを RGB に戻します。	波形モニター CH-1：DUB コネクター／リヤパネル  A＝0.7±0.01Vp-p	⊘ RV18/VIO-14（C-2） TRIG：TV-H モード

4-2-11. DC OFF調整

調整時の状態	規格	調整箇所
• オシロスコープのCH-1にG/Yコネクターを接続します。 • オシロスコープのCH-2にR/RYコネクターを接続します。 • オシロスコープのCH-3にB/B-Yコネクターを接続します。 • RGB/Y CR CBスイッチS4/SEP-3（D-17）をY CR CBに設定します。 調整完了後 • RGB/Y CR CBスイッチをRGBに戻します。	 $B \leqq \frac{A}{2}$	⊘ RV7/VIO-14（F-1） TRIG：TV-Hモード

4-2-12. CFパルスレベル調整

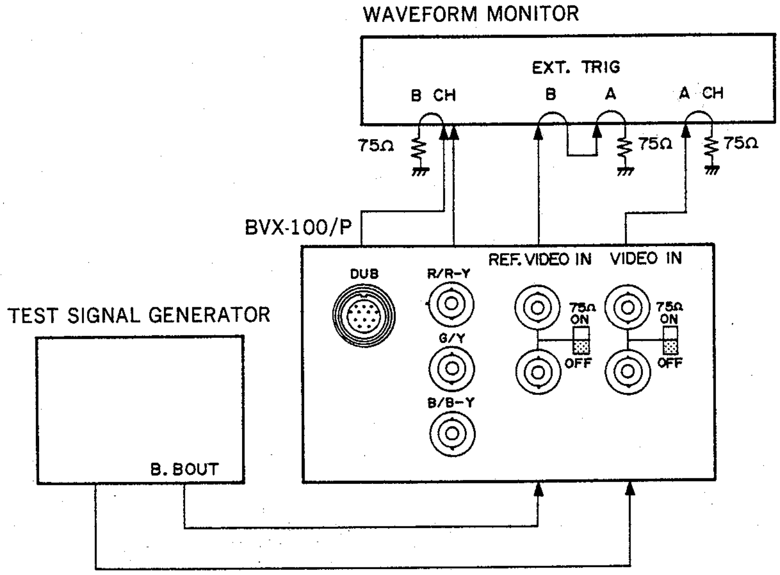
調整時の状態	規格	調整箇所
• 100%カラーバー信号をVIDEO INコネクターに入力します。 • RGB/Y CR CBスイッチS4/SEP-3（D-17）をY CR CBに設定します。 調整完了後 • RGB/Y CR CBスイッチをRGBに戻します。	オシロスコープ TP9/VIO-14（B-2）  $0.70\text{V} \leqq A \fallingdotseq 0.70$ $0.70\text{V} \leqq B \fallingdotseq 0.70$	⊘ RV8/VIO-14（F-2） ⊘ RV19/VIO-14（F-2） TRIG：B. B/REF VIDEO IN

SECTION 4
ELECTRICAL ALIGNMENT

[Reguired Equipment]

- Dual-trace Oscilloscope
- Test Signal Generator : TEKTRONIX 1410 (FOR NTSC)
  : TEKTRONIX 1411 (FOR PAL)
  : TEKTRONIX 1412 (FOR PAL-M)
  or the equivalent
- Waveform Monitor : TEKTRONIX 1485R or the equivalent
- Digital Volt Meter
- Frequency Counter

[Connection]


WAVEFORM MONITOR
EXT. TRIG
B CH
B
A
A CH
75Ω
75Ω
75Ω
BVX-100/P
REF. VIDEO IN
VIDEO IN
DUB
R/R-Y
G/Y
B/B-Y
75Ω ON
OFF
75Ω ON
OFF
TEST SIGNAL GENERATOR
B. BOUT

Test Signal Generator

- Connect the B. B. OUT connector to the REF. VIDEO IN connector. (Set the 75Ω termination switch to OFF.)
- Supply a required signal to VIDEO IN connector.

Waveform Monitor

- Connect the A-CH to the VIDEO IN connector. (A-CH should be terminated by 75Ω.)
- Connect the B-CH to the R/R-Y, G/Y, B/B-Y or DUB connector.
  (B-CH should be terminated by 75Ω.)
- Connect the EXT. TRIG. to the REF. VIDEO IN connector as shown in the figure.
  (Set the 75Ω termination switch to OFF.)

Settings of Switches (Front Panel)

<DEMODULATOR>	
Y/C DELAY MANUAL/PRESET	PRESET
FREEZE ON/OFF	OFF
FREEZE FRAME/FIELD	FRAME
LOCAL/REMOTE	LOCAL
<ANALOG PROC>	
INPUT LEVEL MANUAL/PRESET	PRESET
CHROMA GAIN MANUAL/PRESET	PRESET
SYNC PHASE MANUAL/PRESET	PRESET
BLACK LEVEL MANUAL/OFF/PRESET	PRESET

4-1. DAD-6/P BOARD ALIGNMENT

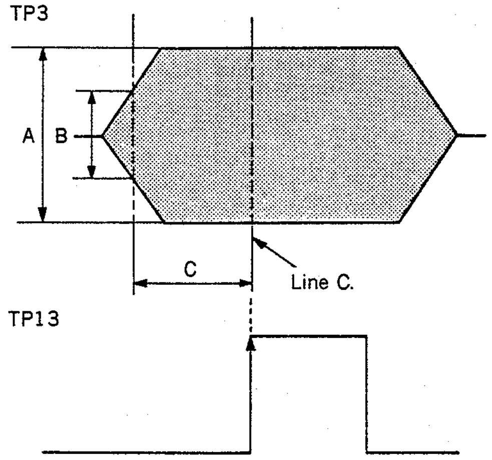
4-1-1. A/D Converter Vcc A, V RB Level Adjustment

machine conditions for adjustment	specifications	adjustment
	TP48/DAD-6/P(L-17) 5.0±0.02Vdc	⊘ RV17/DAD-6/P(C-20)
	TP49/DAD-6/P(D-21) 3.0±0.02Vdc	⊘ RV16/DAD-6/P(E-13)

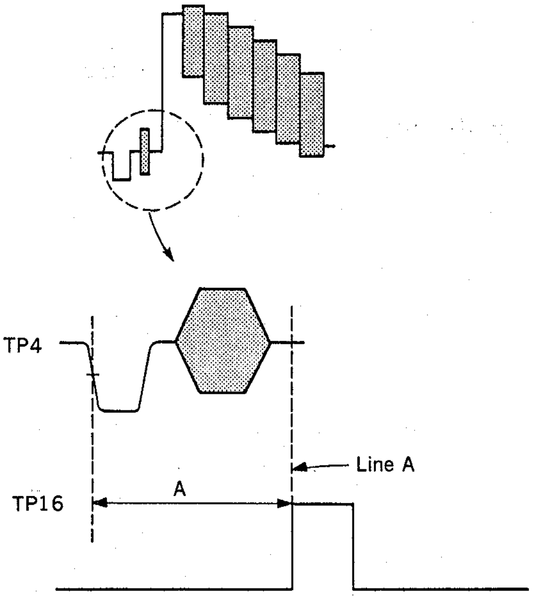
4-1-2. D/A Converter Vcc A, V REF Level Adjustment

machine conditions for adjustment	specifications	adjustment
	TP56/DAD-6/P(J-25) 5.0±0.02Vdc	⊘ RV47/DAD-6/P(H-22)
	TP59/DAD-6/P(K-27) 3.8±0.02Vdc	⊘ RV41/DAD-6/P(K-26)

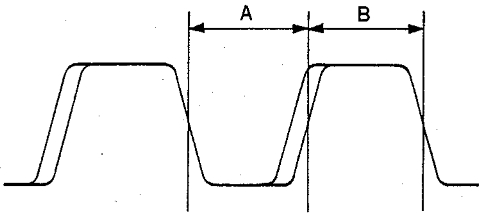
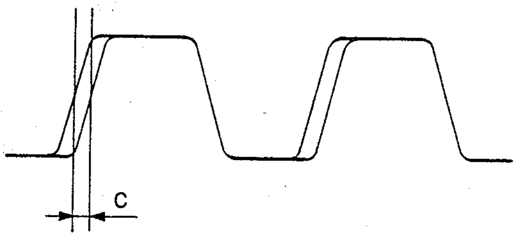
4-1-3. Write System Analogue Clamp Position Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal (without set-up) to the VIDEO IN connector • Oscilloscope Setting: range CH1=1V DIV. CH2=2V DIV. 10μ/DIV. delay 0.1μ/DIV.	Oscilloscope CH-1: TP3/DAD-6/P(B-9) CH-2: TP13/DAD-6/P(D-11)  $A=1\pm0.1\mu$sec $B=\frac{A}{2}$ $C=1\mu$sec The leading edge of the waveform at TP13 should be aligned with line C.	⊘ RV21/DAD-6/P(E-13) TRIG: CH-1/TV-H mode

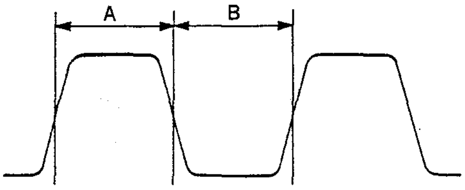
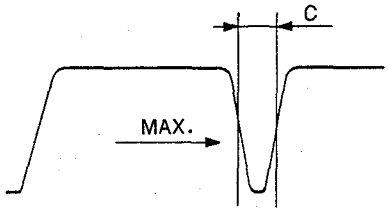
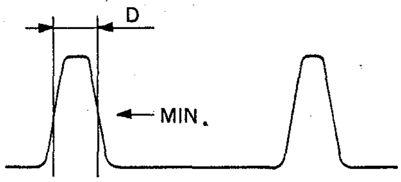
4-1-4 Write System Digital Clamp Position Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal (without set-up) to the VIDEO IN connector. • Oscilloseope Setting range CH1=1V DIV. CH2=2V DIV. 10μ/DIV. delay 0.1μ/DIV	Oscilloscope CH1 : TP4/DAD-6/P(A-14) CH2 : TP16/DAD-6/P(E-13)  〈FOR NTSC〉 A=8.5±0.05μsec 〈FOR PAL〉 A=8.3±0.05μsec The leading edge of the waveform at TP16 should be aligned with line A	⊘ RV24/DAD-6/P(E-13) TIRIG : CH-1/TV-H mode

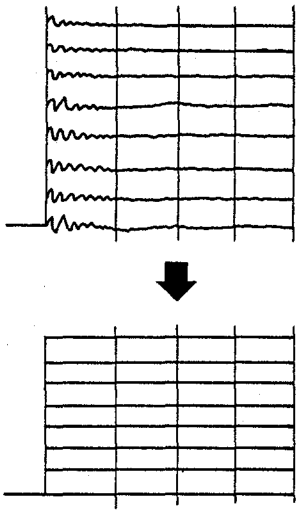
4-1-5. Chroma CK Adjustment 1

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector. • Oscilloscope Setting: range 1V/DIV. 1μ/DIV. time 50nsec/DIV. • Set the Y/C DELAY MANUAL/ PRESET switch (on the front) to MANUAL.	Oscilloscope CH1 : TP57/DAD-6/P(H-20)  A=B	⊘ Y/C DELAY FINE CONTROL/ FRONT PANEL
After the adjustment is completed, set the Y/C DELAY MANUAL/ PRESET switch to PRESET.	 Minimize C (C≦2n sec)	⊘ RV34/DAD-6/P(G-21) TRIG: CH-1/AC mode

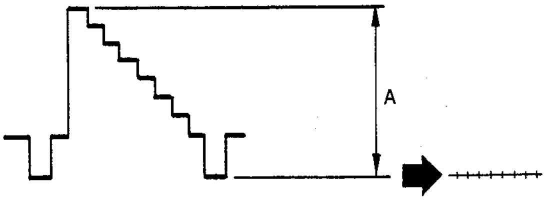
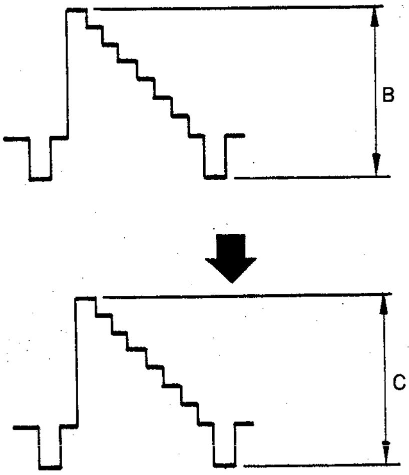
4-1-6. Chroma CK Adjustment 2

machine conditions for adjustment	specifications	adjustment
Step 1 • Supply a 100% color-bars signal to the VIDEO IN connector. • Oscilloscope Setting: renge 1V/DIV. 1μ/DIV. time 50nsec/DIV.	Oscilloscope CH1 : TP57/DAD-6/P(H-20)  A=B	⊘ RV56/DAD-6/P(G-23)
Step 2 • Set the Y/C DELAY MANUAL/PRESET switch (on the front) to MANUAL. • Turn the Y/C DELAY FINE control (on the front) fully clockwise.	 C=32±1nsec	⊘ RV55/DAD-6/P(G-24)
Step 3 • Turn the Y/C DELAY FINE control (on the front) fully counter clockwise. • Repeat step 2 and step 3 until each specification is satisfied. After the adjustment is completed; Set the Y/C DELAY FINE control to mechanical center. Set the Y/C DELAY MANUAL/PRESET switch (on the front) to PRESET.	 D=32±1nsec	⊘ RV56/DAD-6/P(G-23) TRIG: CH1/AC mode

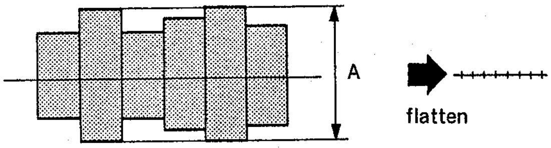
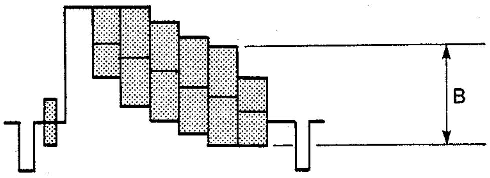
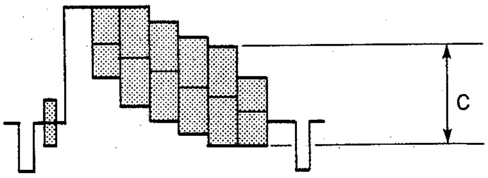
4-1-7. DC OFFSET Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 75% color-bars signal (chroma off) to the VIDEO IN connector. Oscilloscope Setting range 0.2V/DIV.	Oscilloscope CH1 : TP5/DAD-6/P(B-14)  Flatten	⊘ RV5/DAD-6/P(C-3) TRIG: CH1/TV-V mode

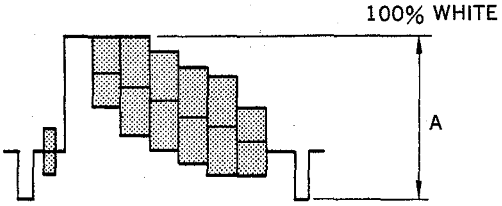
4-1-8. Video Gain Balance Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Supply a 100% color-bars signal (Chroma off) to the VIDEO IN connector.	Oscilloscope CH1 : TP51/DAD-6/P(A-1)  minimize A	⊘ RV2/DAD-6/P(A-18)
Step 2 Step 3 • Set the VIDEO LEVEL MANUAL/PRESET Switch to MANUAL. • Turn the VIDEO LEVEL control fully clockwise. • After the adjustment is completed; Set the VIDEO LEVEL switch to PRESET. Set the VIDEO LEVEL control, to mechanical center.	CH1 :TP1/DAD-6/P(A-5)  C=1.48B	⊘ RV3/DAD-6/P(B-3) TRIG: CH1/TV-H mode

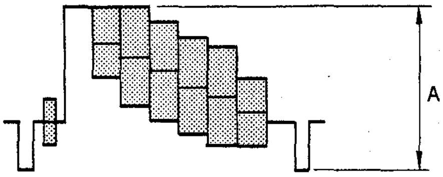
4-1-9. Chroma Gain Balance Adjustment

machine conditions for adjustment	**specifications**	**adjustment**
Step 1 • Supply a 100% color-bars signal to the VIDEO IN connector.	Oscilloscope CH-1 : TP50/DAD-6/P(A-7)  Minimize A	⊘ RV7/DAD-6/P(A-9)
Step 2	CH-1 : TP3/DAD-6/P(B-9) 	
Step 3 • Set the CHROMA GAIN MANUAL/PRESET switch (on the front) to MANUAL. • Turn the CHROMA GAIN control (on the front) fully clockwise. • After the adjustment is completed; Set the CHROMA GAIN MANUAL/PRESET switch to PRESET. Set the CHROMA GAIN control to mechanical center.	 C=1.48B	⊘ RV8/DAD-6/P(A-8) TRIG: CH-1/TV-H mode

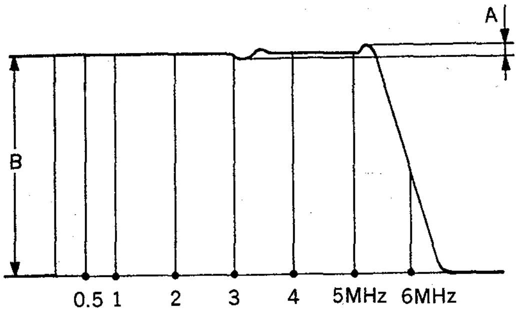
4-1-10. A/D Input Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector.	Oscilloscope CH1 : TP60/DAD-6/P(C-18)  ·A=1.53±0.005 Vp-p	⊘ RV4/DAD-6/P(A-4) TRIG: CH-1/TV-H mode

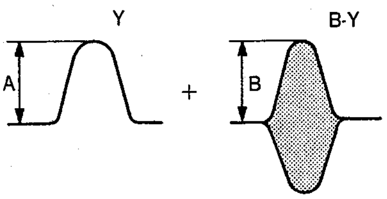
4-1-11. MONITOR OUT Level Adjustment

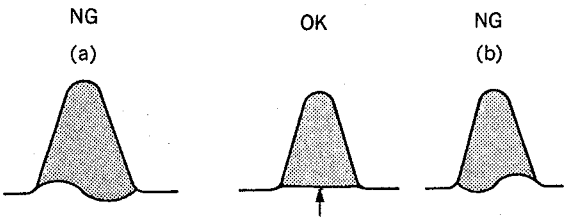
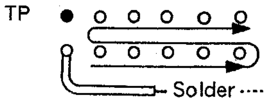
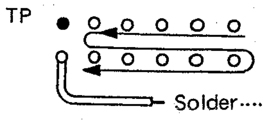
machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector.	Waveform monitor CH-1 : MONITOR OUT connector/Rear Panel  A=1.0±0.01Vp-p	⊘ RV10/DAD-6/P(B-14) TRIG: EXT

4-1-12. MONITOR OUT Frequency Characteristic Adjustment

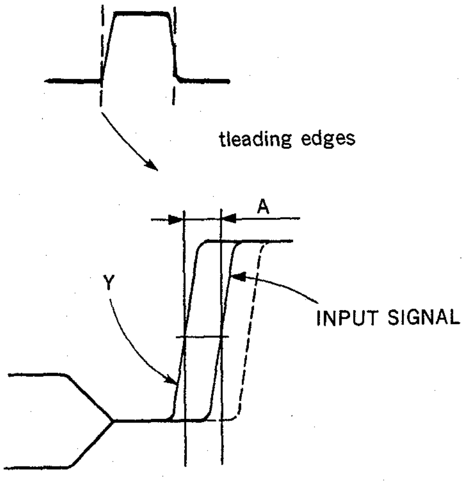
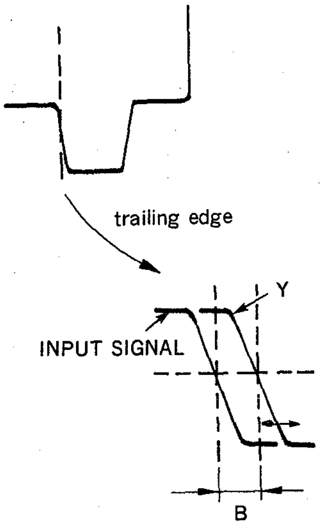
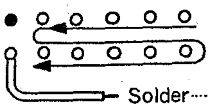
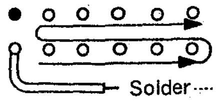
machine conditions for adjustment	specifications	adjustment
• Supply a V sweep signal (Up to 6MHz) to the VIDEO IN connector.	Waveform Monitor CH-1 : MONITOR OUT connector/Rear Panel  Minimize A (A≦0.02B)	⊘ RV53/DAD-6/P(B-5) ⊘ RV54/DAD-6/P(A-4) ⊘ CV1/DAD-6/P(B-4) TRIG: EXT

4-1-13. Y/C Delay Adjustment

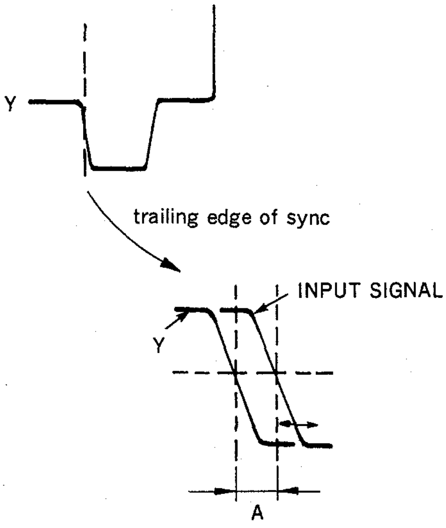
machine conditions for adjustment	specifications	adjustment
• Set the RGB/YCR CB switch S4/SEP-3(D-17) to Y CR CB. • Supply a pulse and bars signal to the VIDEO IN connector.	Oscilloscope CH-1 : G/Y connector/Rear Panel CH-2 : B/B-Y connector/Rear Panel  A=B	

• Add Y and B-Y signals.
• After the adjustment is completed, set the RGB/Y CR CB switch to RGB.
	
	Y signal is proceeded.
	flatten
	Y signal is delayed.
		⊘ DL2/DAD-6/P(J-16)
		FOR (a)
		
		Make Y signal delay.
		FOR (b)
		
		Make Y signal proceed.
		TRIG : TV-H mode

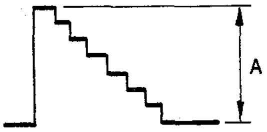
4-1-14. Video Phase Position Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Set the color framing sequence control swith S5/DEC-47/P(E-9) to OFF. • Set the RGB/ Y CR CB switch S4/ SEP-3/P(D-17) to Y CR CB. • Supply a 100% color-bars signal to the VIDEO IN connector. • Supply a 100% color-bars signal to the CH-2 of the oscilloscope. • Set the SYNC PHASE MANUAL/ PRESET switch to MANUAL.	Oscilloscope CH-1 : G/Y connector (Rear Panel)  A=0	⊘ SYNC PHASE control/ Front Panel
Step 2 • Set the color framing sequence control swith S5/DEC-47/P(E-9) to ON. • After the adjustment is completed ; Set the RGB/Y CR CB switch S4/ SEP-3/P(D-17) to RGB. Set the SYNC PHASE MANUAL/ PRESET switch to MANUAL.	 Minimize B (B≦7nsec)	⊘ DL-3/DAD-6/P(K-12)  Make Y signal proceed.  Make Y signal is delayed. TRIG: TV-H mode

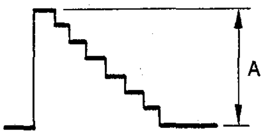
4-1-15. Sync Phase Preset Adjustment

machine conditions for adjustment	specifications	adjustment
• Set the RGB/ Y CR CB switch S4/ SEP-3/P(D-17) to Y CR CB. • Supply a 100% color-bars signal to the CH-2 of the oscilloscope. • After the adjustment is completed, set the RGB/Y CR CB switch S4/ SEP-3/P(D-17) to RGB.	Oscilloscope CH-1 : G/Y connector (Rear Panel)  A=0±1nsec	⊘ RV20/DAD-6/P(A-6) TRIG: CH-2/TV-H mode

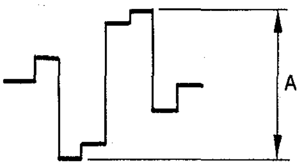
4-1-16. Y Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector.	Oscilloscope CH-1 : TP32/DAD-6/P(J-13)  A=0.5±0.01Vp-p	⊘ RV36/DAD-6/P(J-14) TRIG: TV-H mode

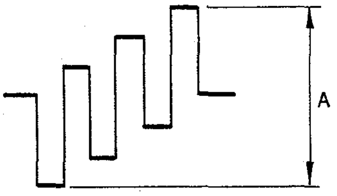
4-1-17. DUB Y Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector. • Supply a 100% color-bars signal to the CH-2 of the oscilloscope.	Oscilloscope CH-1 : TP61/DAD-6/P(K-14)  A=1.1±0.01Vp-p	⊘ RV42/DAD-6/P(K-14) TRIG: CH-2/TV-H mode

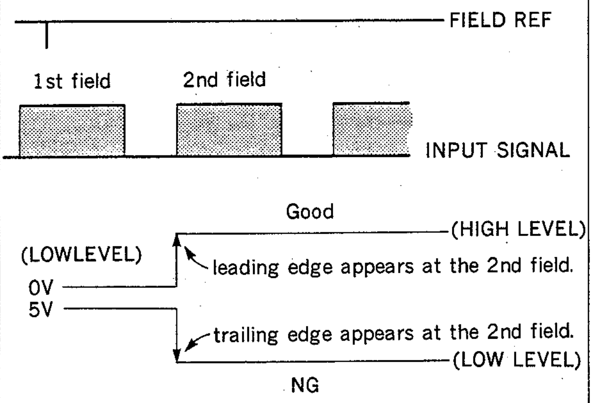
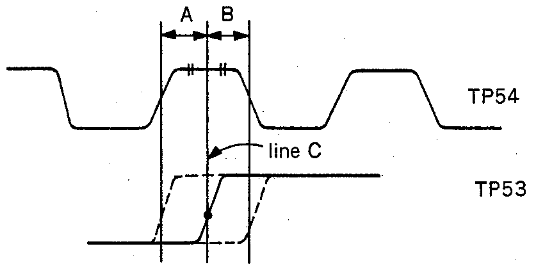
4-1-18. R-Y Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal (without set-up) to the VIDEO IN connector. • Supply a 100% color-bars signal to the CH-2 of the oscilloscope.	Oscilloscope CH1 : TP46/DAD-6/P(L-17)  A=0.5±0.01Vp-p	⊘ RV46/DAD-6/P(L-17) TRIG: CH2/TV-H mode

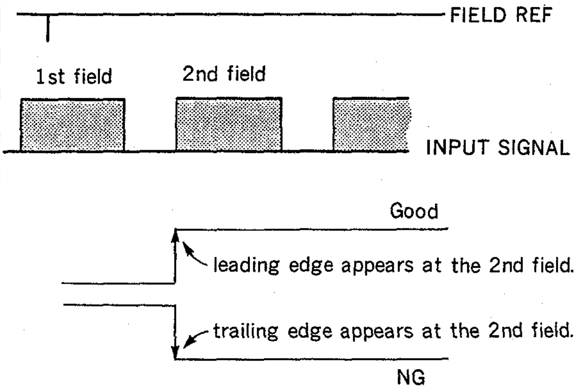
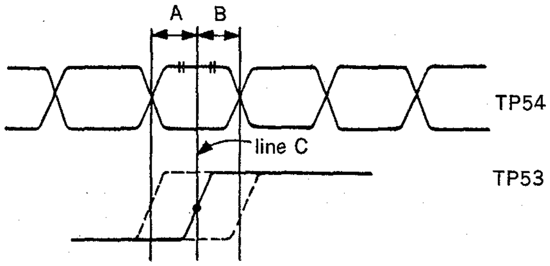
4-1-19. B-Y Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal (without set-up) to the VIDEO IN connector. • Supply a 100% color-bars signal (without set-up) to the CH-2 of the oscilloscope.	Oscilloscope CH1 : TP34/DAD-6/P(K-17)  A=0.5±0.001Vp-p	⊘ RV40/DAD-6/P(K-17) TRIG: CH-2/TV-H mode

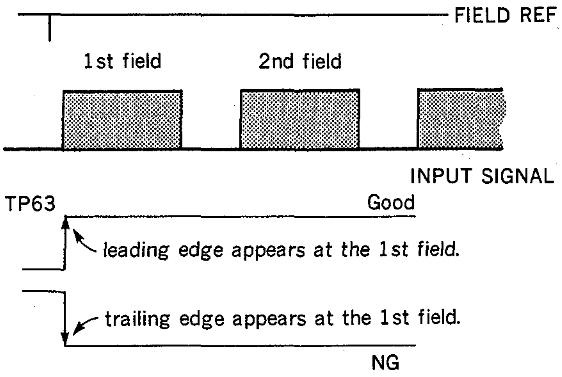
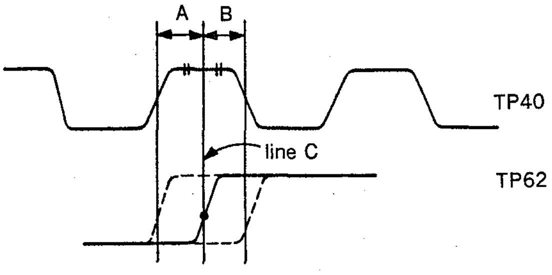
4-1-20. NTSC W FST Field Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Connect the FIELD REF. of the signal generator to the CH-1 of the oscilloscope. • Supply a 100% color-bars signal to the CH-3 of the oscilloscope.	Oscilloscope CH-2 : TP52/DAD-6/P(C-26)  FIELD REF 1st field 2nd field INPUT SIGNAL Good (HIGH LEVEL) (LOWLEVEL) leading edge appears at the 2nd field. 0V 5V trailing edge appears at the 2nd field. (LOW LEVEL) NG	⊘ RV19/DAD-6/P(B-27)
Step 2 (fine adjustment) • Supply a 100% color-bars signal to the VIDEO IN connector.	CH-1 : TP54/DAD-6/P(B-25) CH-2 : TP53/DAD-6/P(B-25)  A B TP54 line C TP53 A=B Align the center of the leading edge of the waveform at TP53 with line C.	TRIG : TV-H mode

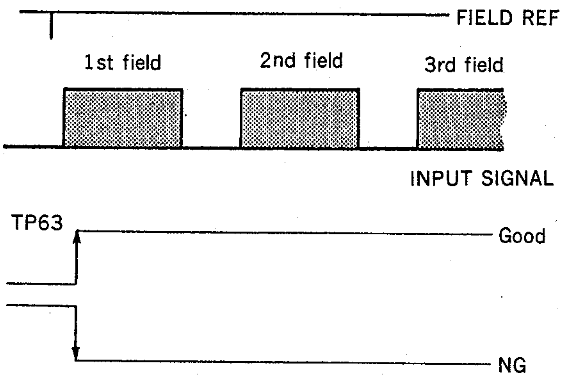
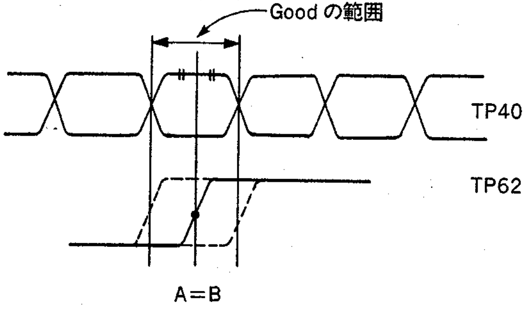
4-1-21. PAL, PAL-M W FST Field Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Connect the FIELD REF. of the signal generator to the CH-1 of the oscilloscope. • Supply a 100% color-bars signal to the CH-3 of the oscilloscope.	Oscilloscope CH-2: TP52/DAD-6/P(C-26)  FIELD REF 1st field 2nd field INPUT SIGNAL Good leading edge appears at the 2nd field. trailing edge appears at the 2nd field. NG	⊘ RV18/DAD-6/P(B-26) TRIG: TV-H mode
Step 2 (fine adjustment) • Supply a 100% color-bars signal to the VIDEO IN connector.	CH-1: TP54/DAD-6/P(B-25) CH-2: TP53/DAD-6/P(B-25)  A B TP54 line C TP53 A=B Align the center of the leading edge of the waveform at TP53 with line C.	

4-1-22. NTSC Color Framing Signal Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Connect the FIELD REF. of the signal generator to the CH 1 of the oscilloscope. • Supply a 100% color-bars signal to the CH-3 of the oscilloscope.	Oscilloscope CH-2 : TP63/DAD-6/P(G-7)  FIELD REF 1st field 2nd field INPUT SIGNAL TP63 Good leading edge appears at the 1st field. trailing edge appears at the 1st field. NG	⊘ RV30/DAD-6/P(G-13)
Step 2 (fine adjustment) • Supply a 100% color-bars signal to the VIDEO IN connector.	CH1 : TP40/DAD-6/P(L-12) CH2 : TP62/DAD-6/P(H-8)  A B TP40 line C TP62 A=B Align the center of the leading edge of the waveform at TP62 with line C.	TRIG : TV-H mode

4-1-23. PAL, PAL-M Color Framing Signal Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Connect the FIELD REF. of the signal generator to the oscilloscope. • Supply a 100% color-bars signal to the CH-3 of the oscilloscope	Oscilloscope CH-2 : TP63/DAD-6/P(G-7)  FIELD REF 1st field 2nd field 3rd field INPUT SIGNAL TP63 Good NG	⊘ RV29/DAD-6/P(G-13)
• Supply a 100% color-bars signal to the VIDEO IN connector.	CH-1 : TP40/DAD-6/P(L-12) CH-2 : TP62/DAD-6/P(H-8)  Good の範囲 TP40 TP62 A=B Align the center of the leading edge of the woveform at TP62 with line C	TRIG : TV-H mode

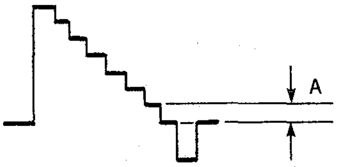
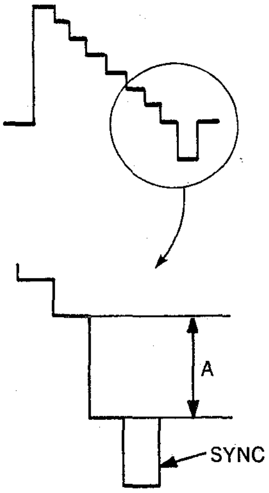
4-1-24. NTSC INT. Lock Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector. • Disconnect the B. B. OUT from the REF. VIDEO IN connector.	Frequeny Counter CH-2 : TP40/DAD-6/P(L-12) 3579545±10Hz	⊘ RV38/DAD-6/P(K-8)

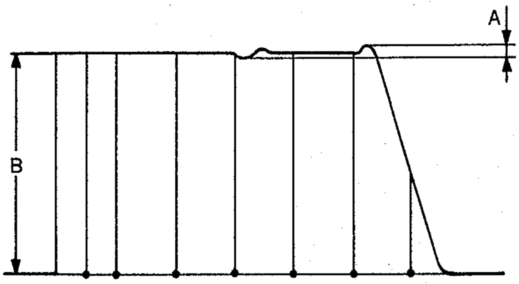
4-1-25. PAL, PAL-M INT Lock Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector. • Disconnect the B. B. OUT from the REF. VIDEO IN connector.	Frequency Counter CH-2 : TP40/DAD-6/P(L-12) ⟨PAL⟩ 4433619±5Hz ⟨PAL-M⟩ 3575611±10Hz	⊘ RV58/DAD-6/P(K-18)

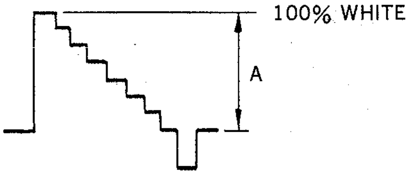
4-1-26. Set-up Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Supply a 75% color-bars signal (with 7.5% set-up) to the VIDEO IN connector. • Set the BLACK LEVEL MANUAL/ OFF/PRESET switch to MANUAL. • Set the RGB/Y CRCB switch S 4/ SEP-3/P(D-17) to Y CR CB. • Turn the RV15/ DAD-6/P(C-17) fully counterclockwise.	Waveform Monitor CH-1 : DUB connector/Rear Panel  A=54±1mV	⊘ RV12/DAD-6/P(A-18)
Step 2 • Turn the BLACK LEVEL control fully clockwise. • After the adjustment is completed; Set the RGB/Y CR CB switch to RGB. Set the BLACK LEVEL switch to PRESET.	 A=165±3mV	⊘ RV15/DAD-6/P(C-17) TRIG : TV-H mode

4-1-27. Y Frequency Characteristic Adjustment

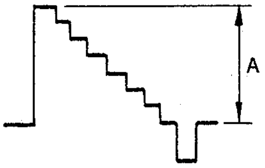
machine conditions for adjustment	specifications	adjustment
• Set the RGB/Y CR CB swtch S4/ SEP-3/P(D-17) to Y CR CB. • Supply a V SWEEP signal to the VIDEO IN connector. • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	Waveform Monitor CH-1 : G/Y Connector/Rear Panel  A≦0.03B	⊘ RV35/DAD-6/P(J-14) TRIG : TV-H mode

4-1-28 PAL, PAL-M Level Adjustment

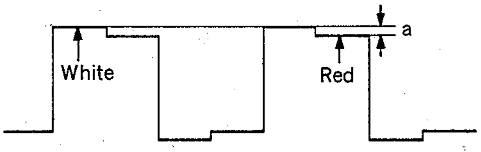
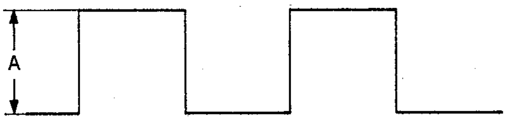
machine conditions for adjustment	specifications	adjustment
• Set the RGB/Y CR CB switch S4 to Y CR CB. • Supply a 100% WHITE PAL or PAL-M signal to the VIDEO IN connector. • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	Waveform Monitor CH-1 : G/Y connector/Rear Panel  A=0.7±0.01Vp-p	⊘ RV1/DAD-6/P(C-3) TRIG : TV-H mode

4-2. VIO-14/P BOARD ALIGNMENT

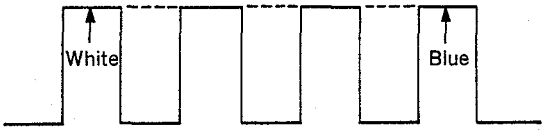
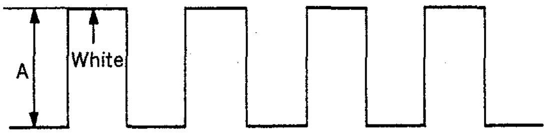
4-2-1. Y Input Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector.	Oscilloscope TP11/VIO-14/P(A-24)  A=1.1±0.01Vp-p	⊘ RV2/VIO-14/P(H-1) TRIG: TV-H mode

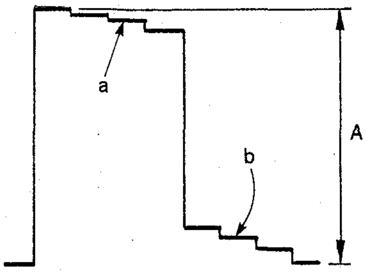
4-2-2. Red Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Supply a 100% coolor-bars signal (without set-up) to the VIDEO IN connector. • Align the R portion with the W portion.	Waveform Monitor CH-1 : R/R-Y Connector/Rear Panel Step 1.  Minimize a	⊘ RV1/VIO-14/P(H-1)
Step 2	Step 2.  A=0.7±0.01Vp-p	⊘ RV9/VIO-14/P(E-1) TRIG: TV-H mode

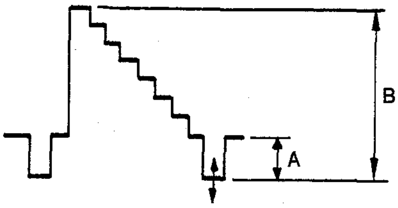
4-2-3. Blue Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Supply a 100% color-bars signal (without set-up) to the VIDEO IN connector.	Waveform Monitor CH-1 : B/B-Y connector/Rear Panel  Align the B portion with the W portion	⊘ RV3/VIO-14/P(H-1)
Step 2	 A=0.7±0.01Vp-p	⊘ RV12/VIO-14/P(E-1) TRIG: TV-H mode

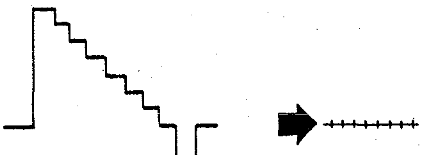
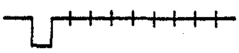
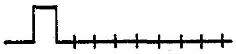
4-2-4. Green Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Supply a 100% color-bars signal (without set-up) to the VIDEO IN connector.	Waveform Monitor CH-1 : G/Y Connector/Rear Panel  Align the a portion with the b portion. A=0.7±0.001Vp-p	⊘ RV4/VIO-14/P(G-1)
Step 2		⊘ RV9/VIO-14/P(E-1) TRIG: TV-H mode

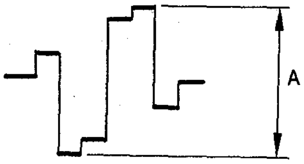
4-2-5. Y Output Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Set the RGB/Y CR CB switch S4 / SEP-3/P board (D-17) to Y CR CB position. • Supply a 100% color-bars signal (chroma-off) to the CH-A of the waveform monitor. • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	Waveform Monitor CH-B: G/Y Connector/Rear Panel  〈NTSC〉 A (Sync Level)=0.286±0.005Vp-p B (Y Level)=1.0±0.005Vp-p 〈PAL, PAL-M〉 A (Sync Level)=0.3±0.005Vp-p B (Y Level)=1.0±0.005Vp-p	Y Level: ⊘ RV16/VIO-14/P(C-1) Sync Level: ⊘ RV6/VIO-14/P(F-1) TRIG: TV-H mode

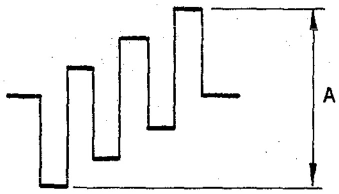
4-2-6. DUB Y Level Adjustment

machine conditions for adjustment	specifications	adjustment
Step 1 • Set the RGB/Y CR CB switch to Y CR CB • Supply a 100% color-bars signal (chroma-off) to the CH-A of the waveform monitor.	Waveform Monitor CH-B: DUB Connector/Rear Panel 	⊘ RV13/VIO-14/P(E-2)
Step 2 (When the Step 1 is not completed, perform the Step 2.) • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	 Turn RV42 to colockwise. Turn RV13 to counterclockwise.  Turn RV42 to counterclockwise. Turn RV13 to clockwise.	⊘ RV42/DAD-6/P(E-2) ⊘ RV13/VIO-14/P(K-14) TRIG: TV-H mode

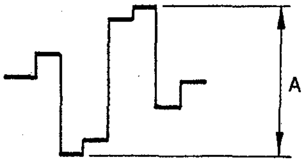
4-2-7. R-Y Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Set the RGB/Y CR CB switch S4/SEP-3/P(D-17) to YCR CB. (FOR NTSC) • Supply a 75% color-bars signal (with 7.5% set-up) to the VIDEO IN connector. (FOR PAL) • Supply a 100% color-bars signal (with 0 set-up) to the VIDEO IN connector. • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	Waveform Monitor CH-1 : R/R-Y connector/Rear Panel  A=0.7±0.01Vp-p	⊘ RV14/VIO-14/P(C-1) TRIG: TV-H mode

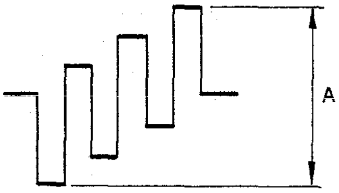
4-2-8. B-Y Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Set the RGB/Y CR CB switch S4/SEP-3/P(D-17) to Y CR CB. (FOR NTSC) • Supply a 75% color-bars signal (with 7.5% set-up) to the VIDEO IN connector. (FOR PAL) • Supply a 100% color-bars signal (with 0 set-up) to the VIDEO IN connector. • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	Waveform Monitor CH-1 : B/B-Y connector/Rear Panel  A=0.7±0.01Vp-p	⊘ RV17/VIO-14/P(C-2) TRIG: TV-H mode

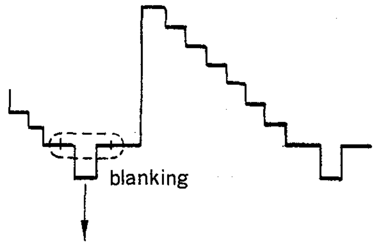
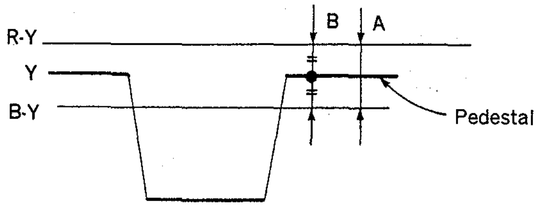
4-2-9. DUB R-Y LEVEL ADJUSTMENT

machine conditions for adjustment	specifications	adjustment
• Set the RGB/Y CR CB switch S4/SEP-3/P(D-17) to YCR CB. (FOR NTSC) • Supply a 100% color-bars signal (with 7.5% set-up) to the VIDEO IN connector. (FOR PAL) • Supply a 100% color-bars signal (with 0 set-up) to the VIDEO IN connector. • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	Waveform Monitor CH-1 : DUB Connector/Rear Panel  A=0.7±0.01Vp-p	⊘ RV15/VIO-14/P(C-1) TRIG: TV-H mode

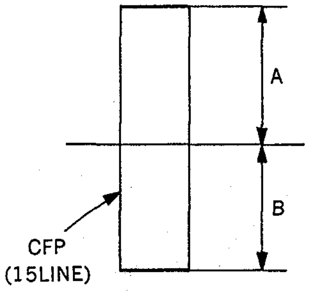
4-2-10. DUB B-Y Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Set the RGB/Y CR CB switch S4/SEP-3/P(D-17) to Y CR CB. (FOR NTSC) • Supply a 100% color-bars signal (with 7.5% set-up) to the VIDEO IN connector. (FOR PAL) • Supply a 100% color-bars signal (with 0 set-up) to the VIDEO IN connector. • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	Waveform Monitor CH-1 : 1DUB Connector/Rear Panel  A=0.7±0.01Vp-p	⊘ RV18/VIO-14/P(C-2) TRIG: TV-H mode

4-2-11. DC Off Adjustment

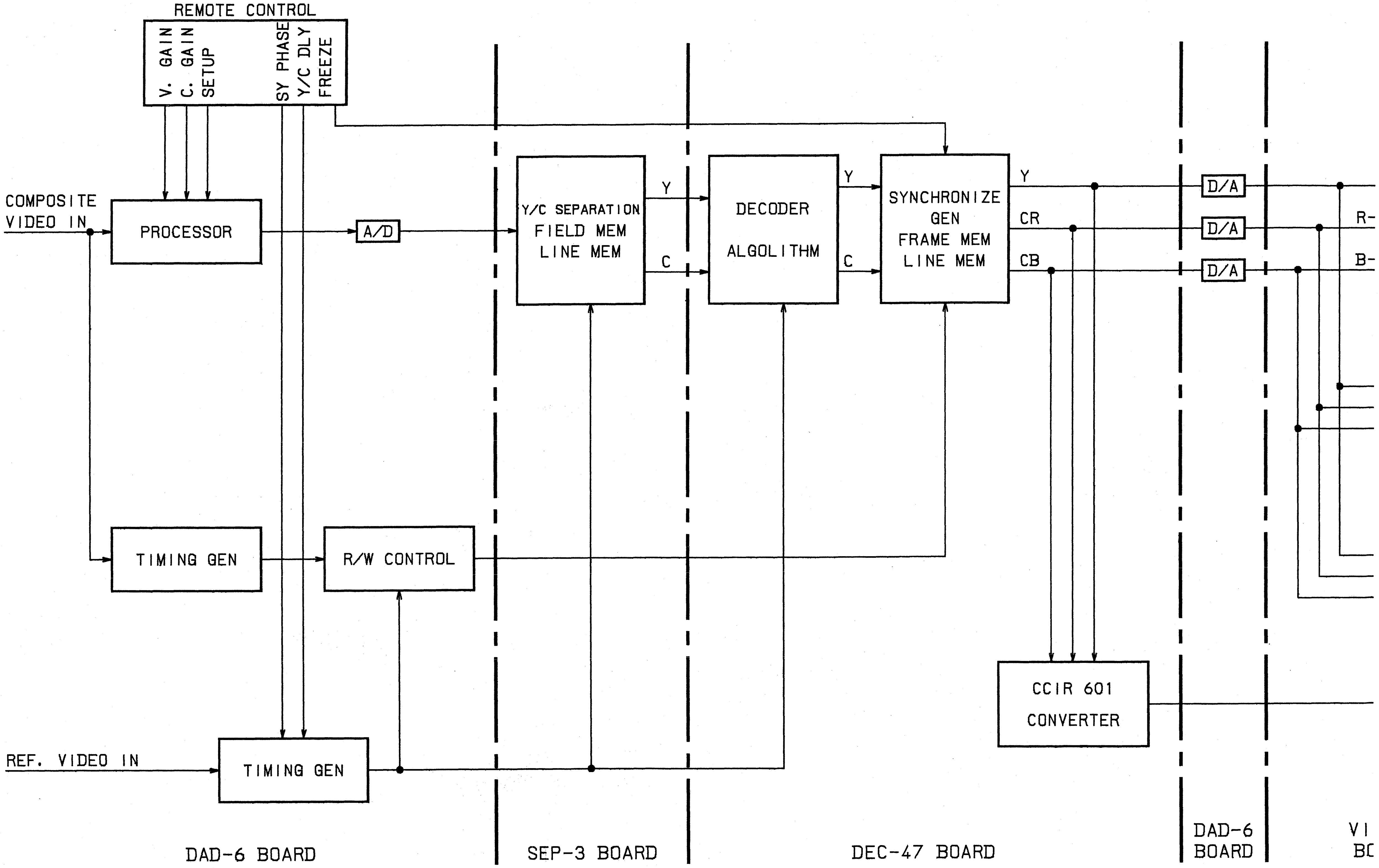
machine conditions for adjustment	specifications	adjustment
• Connect the CH-1 of the oscilloscope to the G/Y connector. • Connect the CH-2 of the oscilloscope to the R/R-Y connector. • Connect the CH-3 of the oscilloscope to the B/B-Y connector. • Set the RGB/Y CR CB switch S4/SEP-3/P(D-17) to Y CR CB. • After the adjustment is completed, set the RGB/Y CR CB switch to Y CR CB.	  $B \leqq \frac{A}{2}$	⊘ RV7/VIO-14/P(F-1) TRIG: TV-H mode

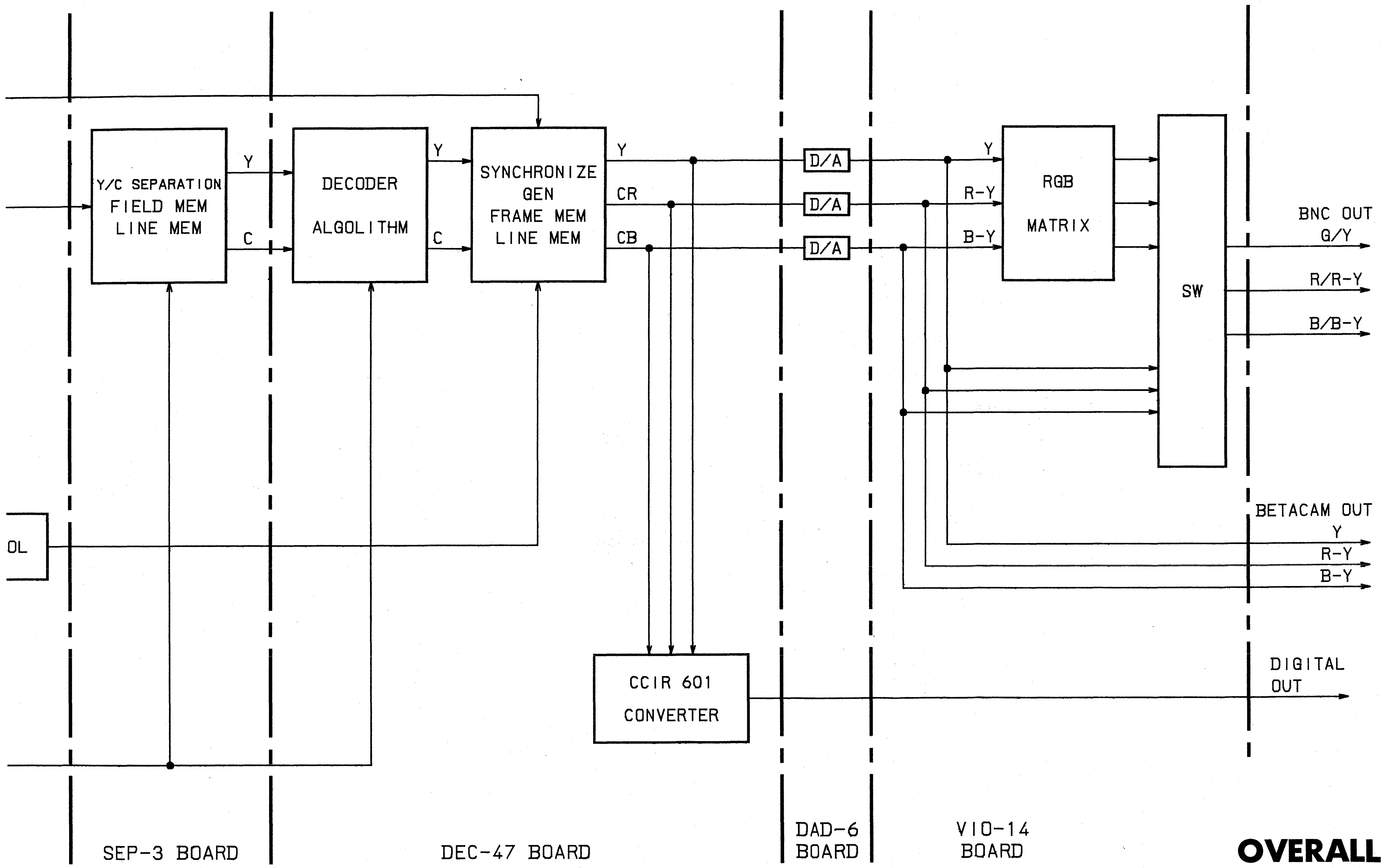
4-2-12. CF Pulse Level Adjustment

machine conditions for adjustment	specifications	adjustment
• Supply a 100% color-bars signal to the VIDEO IN connector. • Set the RGB/Y CR CB switch S4/SEP-3/P(D-17) to Y CR CB. • After the adjustment is completed, set the RGB/Y CR CB switch to RGB.	Oscilloscope (FOR NTSC) TP9/VIO-14/P(B-2) (FOR PAL) TP6/VIO-14/P(B-1)  $0.70 \leqq A \fallingdotseq 0.70$V $0.70 \leqq B \fallingdotseq 0.70$V	⊘ RV8/VIO-14/P(F-2) ⊘ RV19/VIO-14/P(F-2) TRIG: B.B/REF. VIDEO IN

SECTION 5
BLOCK DIAGRAMS

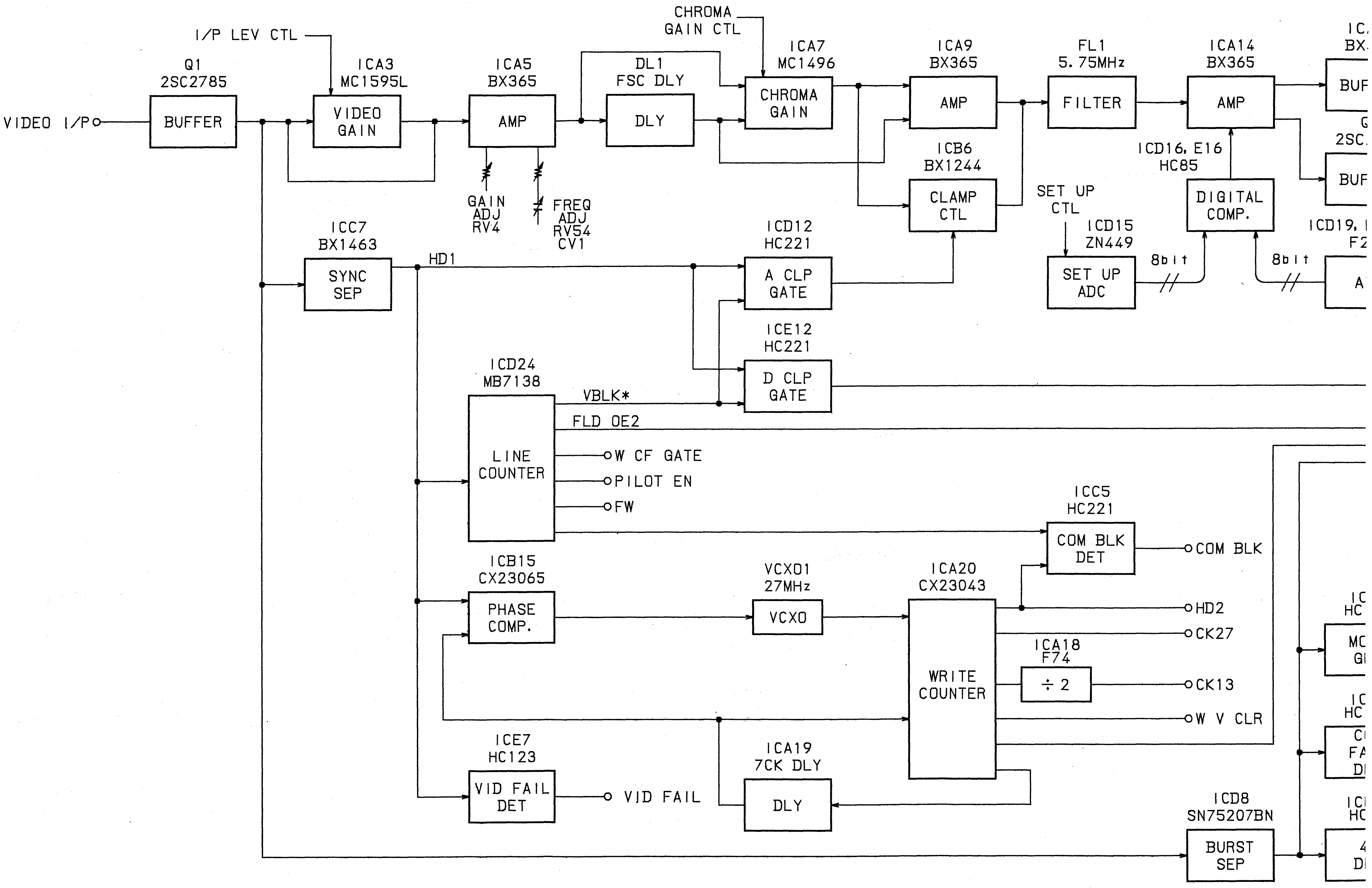
OVERALL

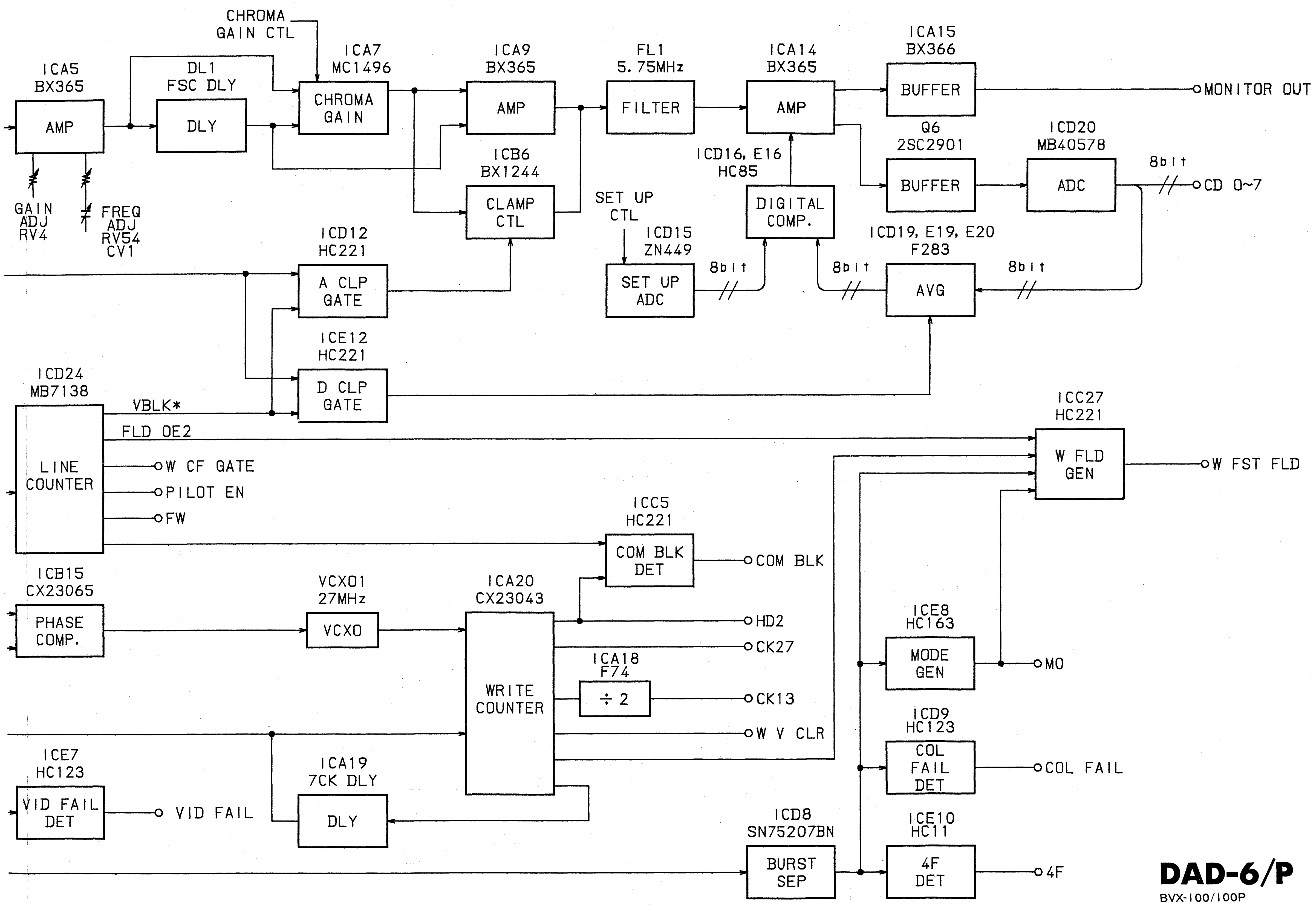

REMOTE CONTROL
V. GAIN
C. GAIN
SETUP
SY PHASE
Y/C DLY
FREEZE
COMPOSITE VIDEO IN
PROCESSOR
A/D
Y/C SEPARATION
FIELD MEM
LINE MEM
Y
C
DECODER
ALGOLITHM
Y
C
SYNCHRONIZE GEN
FRAME MEM
LINE MEM
Y
CR
CB
D/A
D/A
D/A
R-
B-
TIMING GEN
R/W CONTROL
CCIR 601 CONVERTER
REF. VIDEO IN
TIMING GEN
DAD-6 BOARD
SEP-3 BOARD
DEC-47 BOARD
DAD-6 BOARD
VI
BC


Y/C SEPARATION
FIELD MEM
LINE MEM
Y
C
DECODER
ALGOLITHM
Y
C
SYNCHRONIZE
GEN
FRAME MEM
LINE MEM
Y
CR
CB
D/A
D/A
D/A
Y
R-Y
B-Y
RGB
MATRIX
SW
BNC OUT
G/Y
R/R-Y
B/B-Y
BETACAM OUT
Y
R-Y
B-Y
CCIR 601
CONVERTER
DIGITAL
OUT
OL
SEP-3 BOARD
DEC-47 BOARD
DAD-6
BOARD
VIO-14
BOARD

OVERALL
BVX-100/100P

ANALOGUE PROCESSOR (WRITE BOARD)

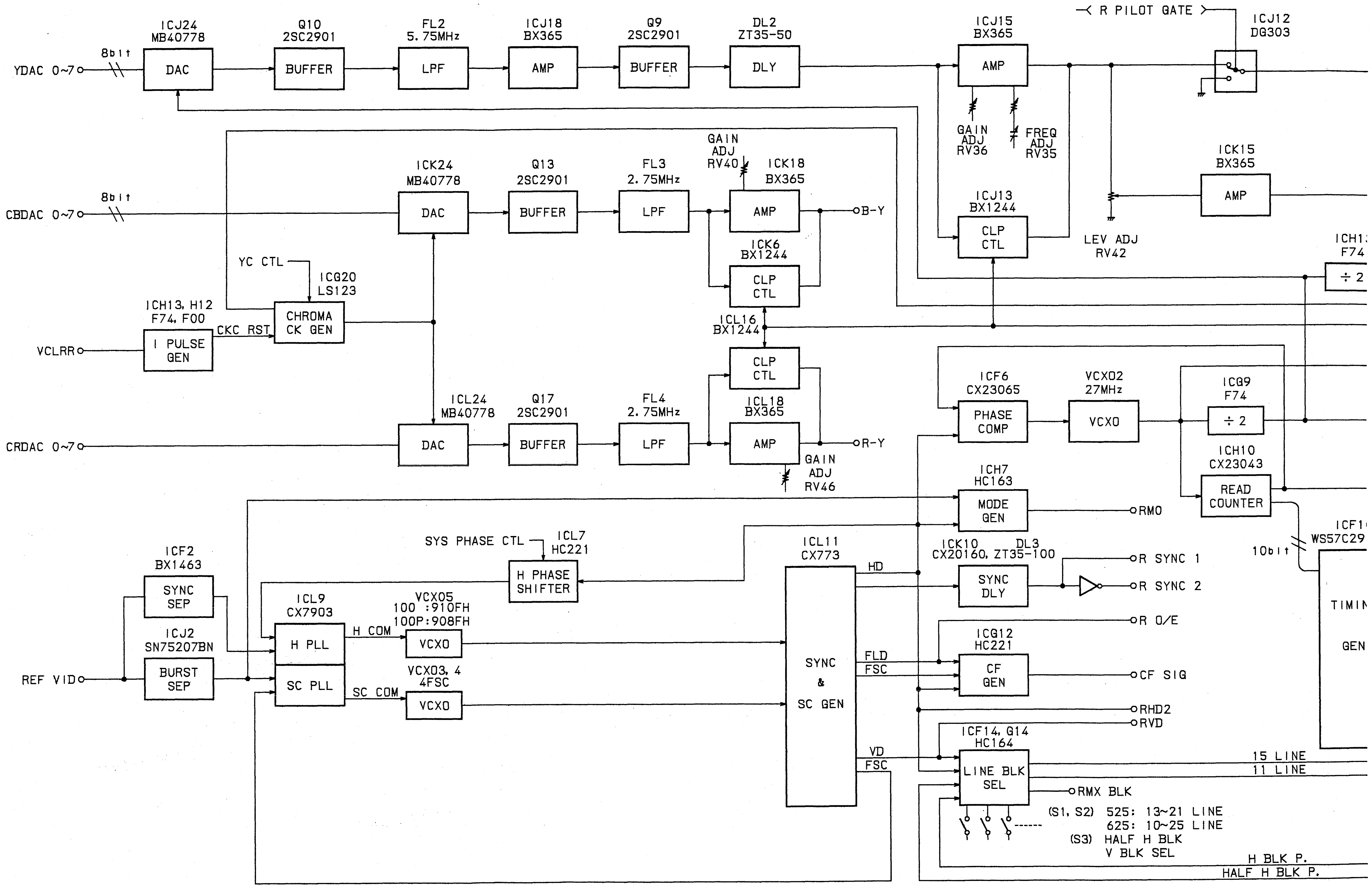

VIDEO I/P
Q1
2SC2785
BUFFER
I/P LEV CTL
ICA3
MC1595L
VIDEO GAIN
ICA5
BX365
AMP
GAIN ADJ RV4
FREQ ADJ RV54 CV1
DL1
FSC DLY
DLY
CHROMA GAIN CTL
ICA7
MC1496
CHROMA GAIN
ICA9
BX365
AMP
ICB6
BX1244
CLAMP CTL
FL1
5.75MHz
FILTER
ICA14
BX365
AMP
ICD16, E16
HC85
DIGITAL COMP.
SET UP CTL
ICD15
ZN449
SET UP ADC
8bit
8bit
ICD19,
F2
A
IC
BX
BUF
2SC
BUF
ICC7
BX1463
SYNC SEP
HD1
ICD12
HC221
A CLP GATE
ICE12
HC221
D CLP GATE
ICD24
MB7138
LINE COUNTER
VBLK*
FLD OE2
W CF GATE
PILOT EN
FW
ICC5
HC221
COM BLK DET
COM BLK
ICB15
CX23065
PHASE COMP.
VCXO1
27MHz
VCXO
ICA20
CX23043
WRITE COUNTER
HD2
CK27
ICA18
F74
÷ 2
CK13
W V CLR
ICE7
HC123
VID FAIL DET
VID FAIL
ICA19
7CK DLY
DLY
ICD8
SN75207BN
BURST SEP
IC
HC
MC
GI
IC
HC
C
FA
D
IC
HC
4
D

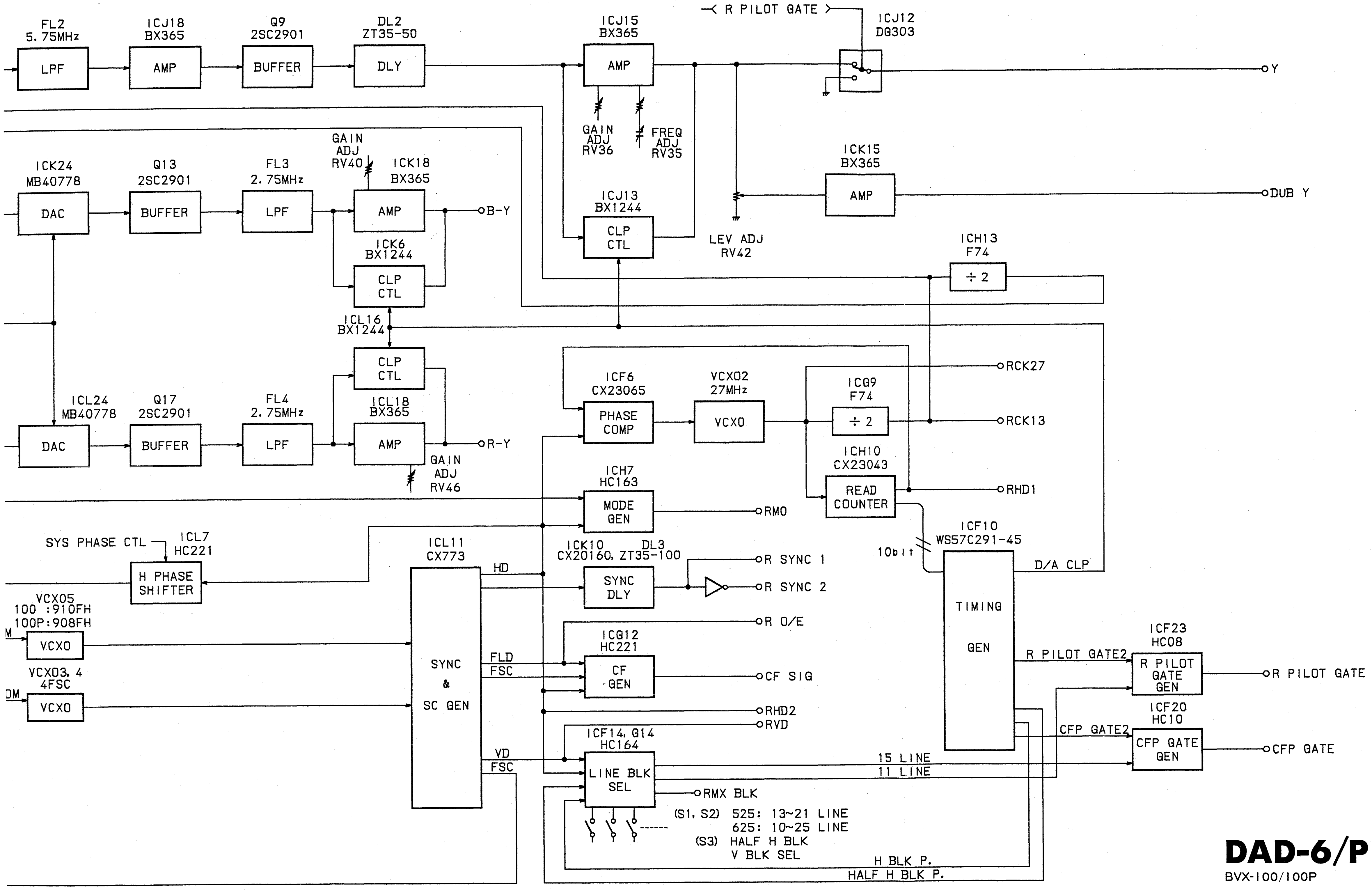

CHROMA GAIN CTL
ICA5 BX365
AMP
GAIN ADJ RV4
FREQ ADJ RV54 CV1
DL1 FSC DLY
DLY
ICA7 MC1496
CHROMA GAIN
ICA9 BX365
AMP
ICB6 BX1244
CLAMP CTL
FL1 5.75MHz
FILTER
ICA14 BX365
AMP
ICD16, E16 HC85
DIGITAL COMP.
SET UP CTL
ICD15 ZN449
SET UP ADC
8bit
ICA15 BX366
BUFFER
MONITOR OUT
Q6 2SC2901
BUFFER
ICD20 MB40578
ADC
8bit
CD 0~7
ICD19, E19, E20 F283
AVG
8bit
8bit
ICD12 HC221
A CLP GATE
ICE12 HC221
D CLP GATE
ICD24 MB7138
VBLK*
FLD OE2
LINE COUNTER
W CF GATE
PILOT EN
FW
ICC27 HC221
W FLD GEN
W FST FLD
ICC5 HC221
COM BLK DET
COM BLK
ICB15 CX23065
PHASE COMP.
VCXO1 27MHz
VCXO
ICA20 CX23043
WRITE COUNTER
HD2
CK27
ICA18 F74
÷ 2
CK13
W V CLR
ICE8 HC163
MODE GEN
MO
ICD9 HC123
COL FAIL DET
COL FAIL
ICE7 HC123
VID FAIL DET
VID FAIL
ICA19 7CK DLY
DLY
ICD8 SN75207BN
BURST SEP
ICE10 HC11
4F DET
4F

DAD-6/P

BVX-100/100P

ANALOGUE PROCESSOR (READ BOARD)

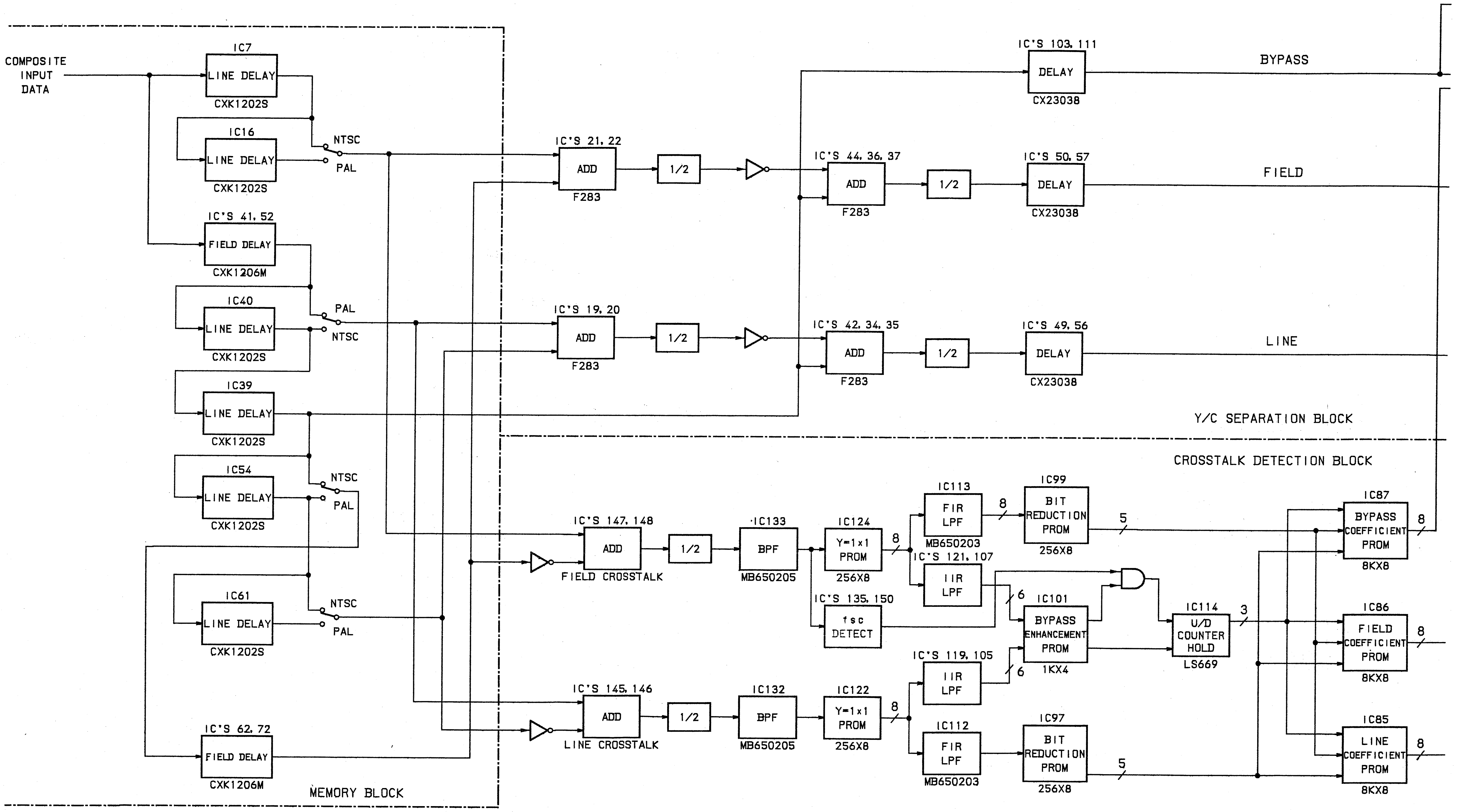

YDAC 0~7
8bit
ICJ24
MB40778
DAC
Q10
2SC2901
BUFFER
FL2
5.75MHz
LPF
ICJ18
BX365
AMP
Q9
2SC2901
BUFFER
DL2
ZT35-50
DLY
ICJ15
BX365
AMP
GAIN
ADJ
RV36
FREQ
ADJ
RV35
R PILOT GATE
ICJ12
DG303
ICJ13
BX1244
CLP
CTL
LEV ADJ
RV42
ICK15
BX365
AMP
CBDAC 0~7
8bit
ICK24
MB40778
DAC
Q13
2SC2901
BUFFER
FL3
2.75MHz
LPF
GAIN
ADJ
RV40
ICK18
BX365
AMP
B-Y
ICK6
BX1244
CLP
CTL
ICL16
BX1244
CLP
CTL
YC CTL
ICG20
LS123
CHROMA
CK GEN
ICH13, H12
F74, F00
I PULSE
GEN
CKC RST
VCLRR
ICH1
F74
÷ 2
CRDAC 0~7
ICL24
MB40778
DAC
Q17
2SC2901
BUFFER
FL4
2.75MHz
LPF
ICL18
BX365
AMP
R-Y
GAIN
ADJ
RV46
ICF6
CX23065
PHASE
COMP
VCXO2
27MHz
VCXO
ICG9
F74
÷ 2
ICH10
CX23043
READ
COUNTER
ICH7
HC163
MODE
GEN
RMO
10bit
ICF1
WS57C29
TIMI
GEN
ICF2
BX1463
SYNC
SEP
ICJ2
SN75207BN
BURST
SEP
REF VID
SYS PHASE CTL
ICL7
HC221
H PHASE
SHIFTER
ICL9
CX7903
H PLL
SC PLL
H COM
SC COM
VCXO5
100 :910FH
100P:908FH
VCXO
VCXO3, 4
4FSC
VCXO
ICL11
CX773
SYNC
&
SC GEN
HD
FLD
FSC
VD
FSC
ICK10 DL3
CX20160, ZT35-100
SYNC
DLY
R SYNC 1
R SYNC 2
R O/E
ICG12
HC221
CF
GEN
CF SIG
RHD2
RVD
ICF14, G14
HC164
LINE BLK
SEL
RMX BLK
15 LINE
11 LINE
(S1, S2) 525: 13~21 LINE
625: 10~25 LINE
(S3) HALF H BLK
V BLK SEL
H BLK P.
HALF H BLK P.

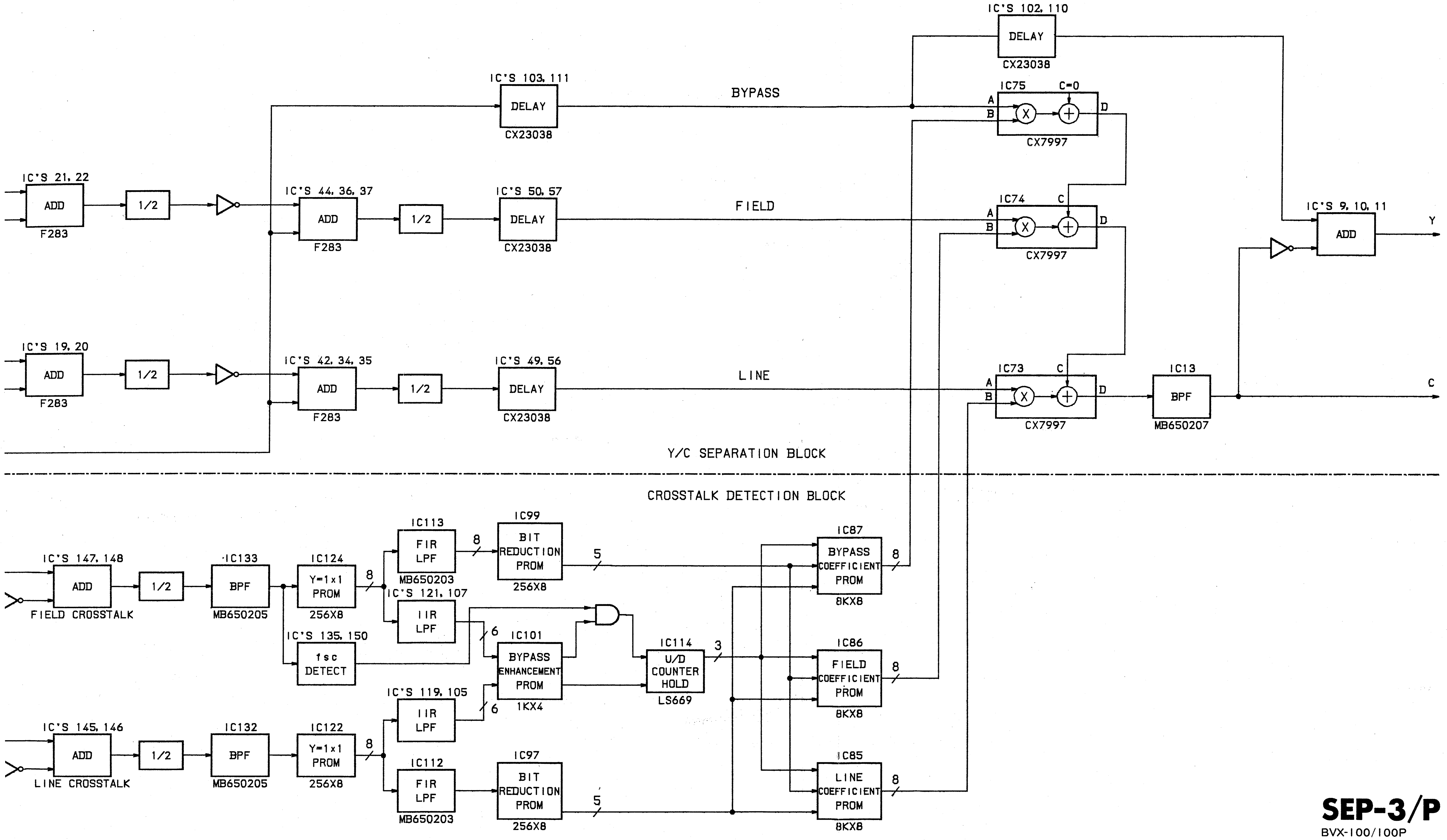

FL2
5.75MHz
LPF
ICJ18
BX365
AMP
Q9
2SC2901
BUFFER
DL2
ZT35-50
DLY
ICJ15
BX365
AMP
GAIN
ADJ
RV36
FREQ
ADJ
RV35
R PILOT GATE
ICJ12
DG303
Y
ICK15
BX365
AMP
DUB Y
ICJ13
BX1244
CLP
CTL
LEV ADJ
RV42
ICH13
F74
÷ 2
ICK24
MB40778
DAC
Q13
2SC2901
BUFFER
FL3
2.75MHz
LPF
GAIN
ADJ
RV40
ICK18
BX365
AMP
B-Y
ICK6
BX1244
CLP
CTL
ICL16
BX1244
CLP
CTL
ICL24
MB40778
DAC
Q17
2SC2901
BUFFER
FL4
2.75MHz
LPF
ICL18
BX365
AMP
R-Y
GAIN
ADJ
RV46
ICF6
CX23065
PHASE
COMP
VCXO2
27MHz
VCXO
ICG9
F74
÷ 2
RCK27
RCK13
ICH10
CX23043
READ
COUNTER
RHD1
ICH7
HC163
MODE
GEN
RMO
SYS PHASE CTL
ICL7
HC221
H PHASE
SHIFTER
ICL11
CX773
HD
ICK10
CX20160, ZT35-100
DL3
SYNC
DLY
R SYNC 1
R SYNC 2
10bit
ICF10
WS57C291-45
D/A CLP
TIMING
GEN
VCXO5
100 :910FH
100P:908FH
M
VCXO
VCXO3, 4
4FSC
DM
VCXO
SYNC
&
SC GEN
FLD
FSC
ICG12
HC221
CF
GEN
R O/E
CF SIG
RHD2
RVD
VD
FSC
ICF14, G14
HC164
LINE BLK
SEL
RMX BLK
15 LINE
11 LINE
(S1, S2) 525: 13~21 LINE
625: 10~25 LINE
(S3) HALF H BLK
V BLK SEL
H BLK P.
HALF H BLK P.
R PILOT GATE2
ICF23
HC08
R PILOT
GATE
GEN
R PILOT GATE
CFP GATE2
ICF20
HC10
CFP GATE
GEN
CFP GATE

DAD-6/P

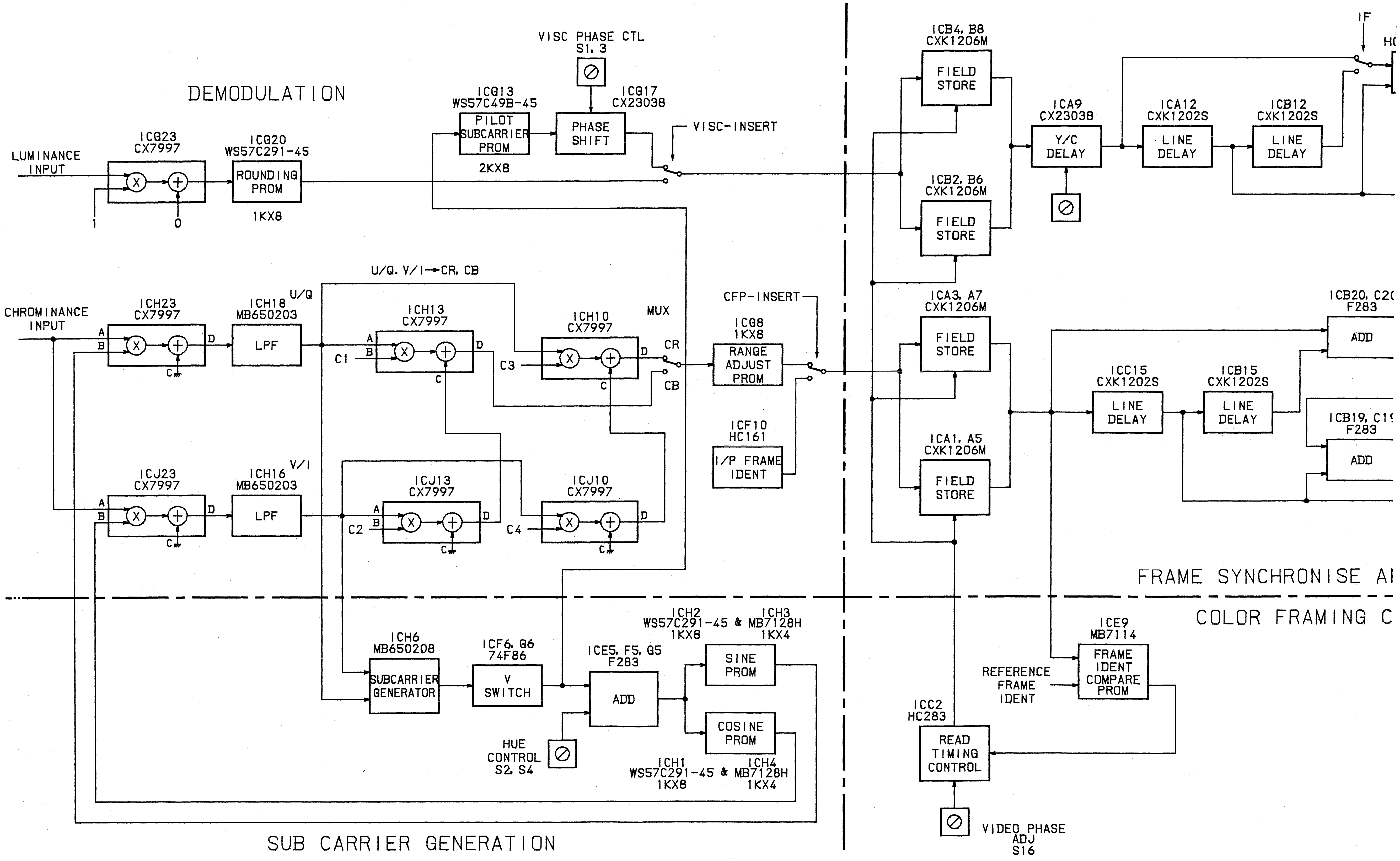
BVX-100/100P

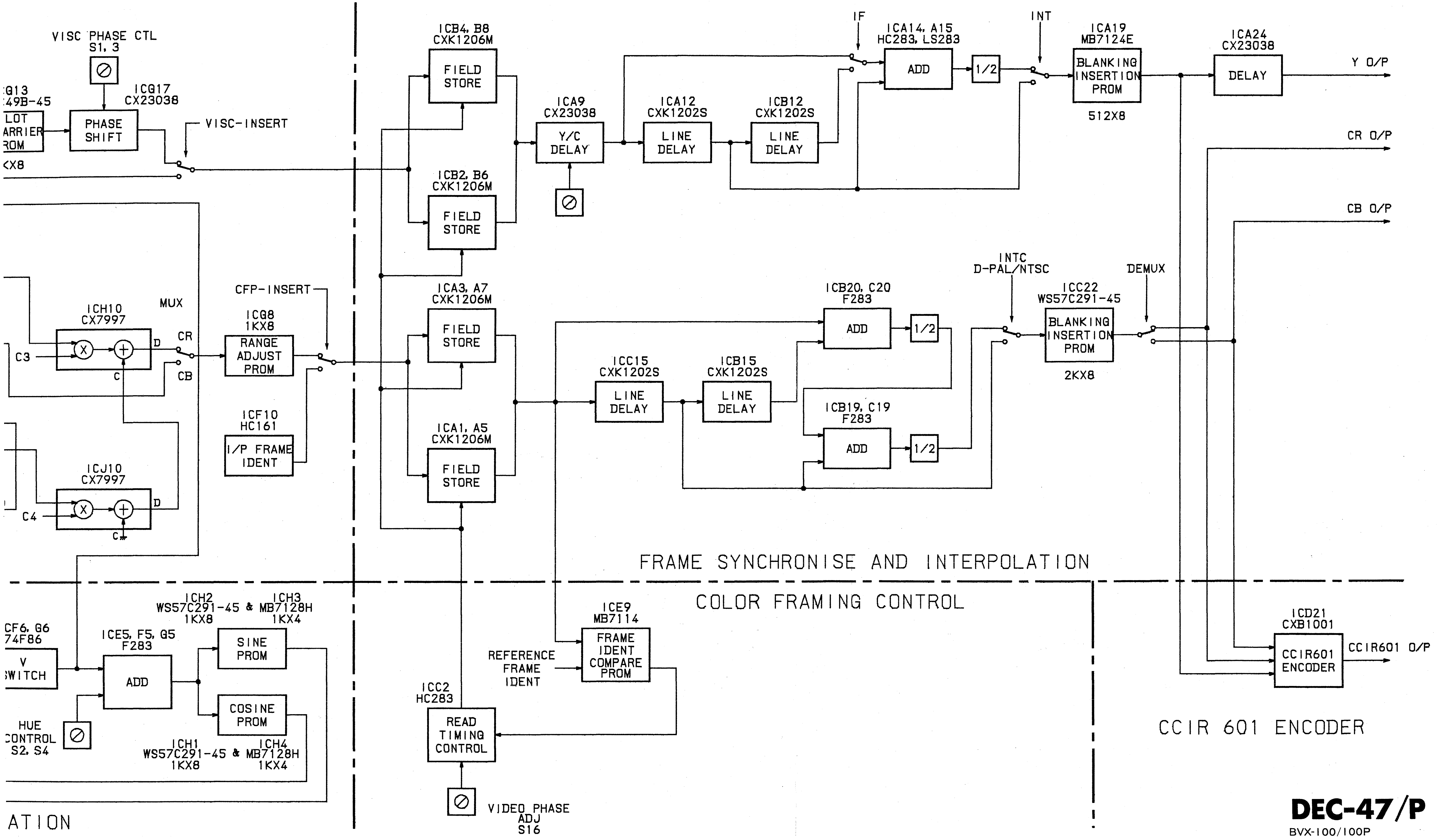
Y/C SEPARATION BOARD


COMPOSITE INPUT DATA
IC7
LINE DELAY
CXK1202S
IC16
LINE DELAY
CXK1202S
NTSC
PAL
IC'S 41, 52
FIELD DELAY
CXK1206M
IC40
LINE DELAY
CXK1202S
PAL
NTSC
IC39
LINE DELAY
CXK1202S
IC54
LINE DELAY
CXK1202S
NTSC
PAL
IC61
LINE DELAY
CXK1202S
NTSC
PAL
IC'S 62, 72
FIELD DELAY
CXK1206M
MEMORY BLOCK
IC'S 21, 22
ADD
F283
1/2
IC'S 19, 20
ADD
F283
1/2
IC'S 44, 36, 37
ADD
F283
1/2
IC'S 42, 34, 35
ADD
F283
1/2
IC'S 103, 111
DELAY
CX23038
BYPASS
IC'S 50, 57
DELAY
CX23038
FIELD
IC'S 49, 56
DELAY
CX23038
LINE
Y/C SEPARATION BLOCK
CROSSTALK DETECTION BLOCK
IC'S 147, 148
ADD
FIELD CROSSTALK
1/2
IC133
BPF
MB650205
IC124
Y=1x1
PROM
256X8
8
IC113
FIR
LPF
MB650203
8
IC99
BIT
REDUCTION
PROM
256X8
5
IC'S 121, 107
IIR
LPF
6
IC'S 135, 150
fsc
DETECT
IC101
BYPASS
ENHANCEMENT
PROM
1KX4
IC114
U/D
COUNTER
HOLD
LS669
3
IC87
BYPASS
COEFFICIENT
PROM
8KX8
8
IC86
FIELD
COEFFICIENT
PROM
8KX8
8
IC85
LINE
COEFFICIENT
PROM
8KX8
8
IC'S 145, 146
ADD
LINE CROSSTALK
1/2
IC132
BPF
MB650205
IC122
Y=1x1
PROM
256X8
8
IC'S 119, 105
IIR
LPF
6
IC112
FIR
LPF
MB650203
IC97
BIT
REDUCTION
PROM
256X8
5


IC'S 102, 110
DELAY
CX23038
IC'S 103, 111
DELAY
CX23038
BYPASS
IC75
C=0
A
B
D
CX7997
IC'S 21, 22
ADD
F283
1/2
IC'S 44, 36, 37
ADD
F283
1/2
IC'S 50, 57
DELAY
CX23038
FIELD
IC74
C
A
B
D
CX7997
IC'S 9, 10, 11
ADD
Y
IC'S 19, 20
ADD
F283
1/2
IC'S 42, 34, 35
ADD
F283
1/2
IC'S 49, 56
DELAY
CX23038
LINE
IC73
C
A
B
D
CX7997
IC13
BPF
MB650207
C
Y/C SEPARATION BLOCK
CROSSTALK DETECTION BLOCK
IC113
FIR
LPF
MB650203
8
IC99
BIT
REDUCTION
PROM
256X8
5
IC87
BYPASS
COEFFICIENT
PROM
8KX8
8
IC'S 147, 148
ADD
FIELD CROSSTALK
1/2
IC133
BPF
MB650205
IC124
Y=1x1
PROM
256X8
8
IC'S 121, 107
IIR
LPF
6
IC'S 135, 150
fsc
DETECT
IC101
BYPASS
ENHANCEMENT
PROM
1KX4
IC114
U/D
COUNTER
HOLD
LS669
3
IC86
FIELD
COEFFICIENT
PROM
8KX8
8
IC'S 119, 105
IIR
LPF
6
IC'S 145, 146
ADD
LINE CROSSTALK
1/2
IC132
BPF
MB650205
IC122
Y=1x1
PROM
256X8
8
IC112
FIR
LPF
MB650203
IC97
BIT
REDUCTION
PROM
256X8
5
IC85
LINE
COEFFICIENT
PROM
8KX8
8

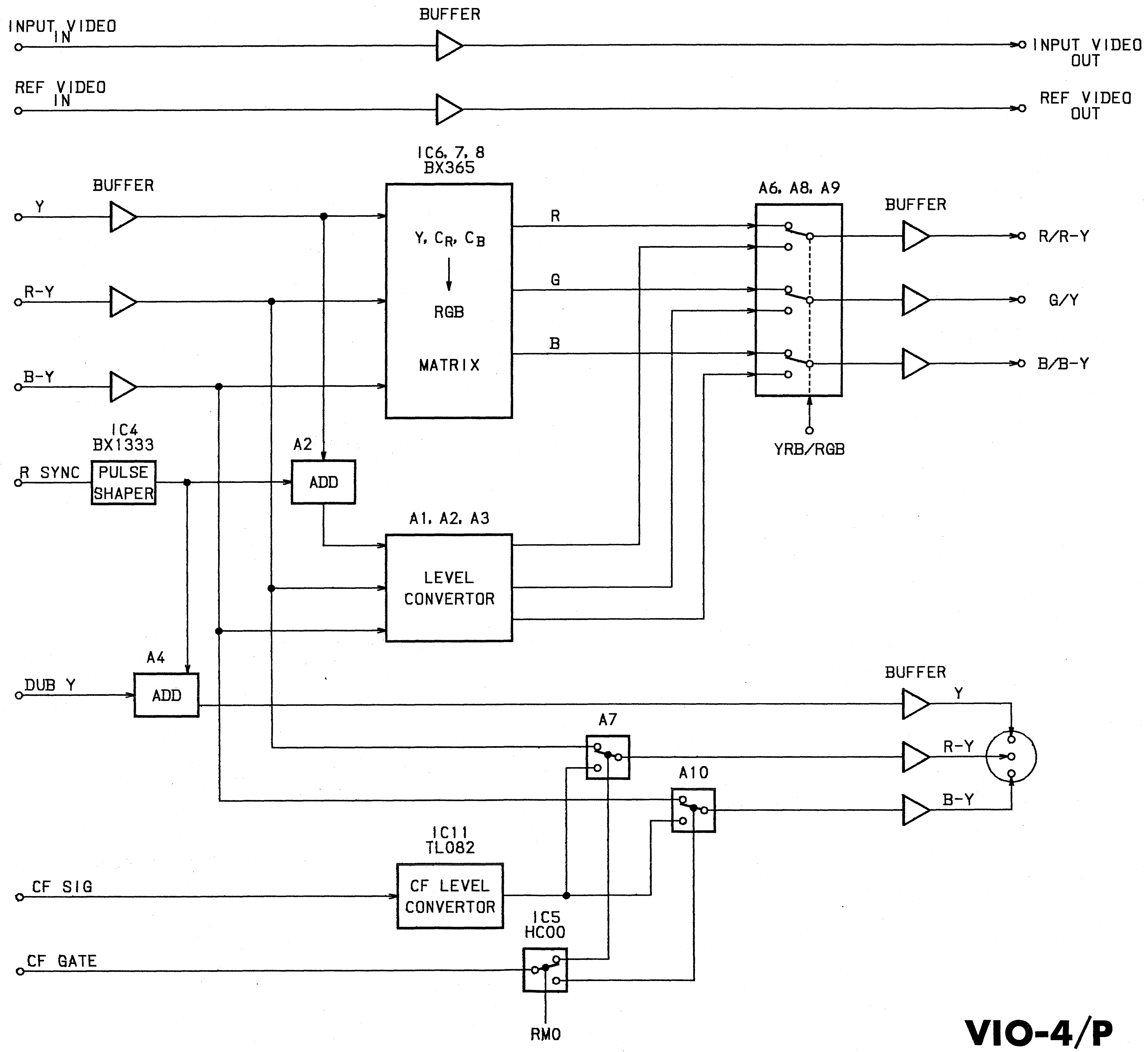
SEP-3/P
BVX-100/100P


DEMODULATION
LUMINANCE INPUT
ICG23 CX7997
1
0
ICG20 WS57C291-45
ROUNDING PROM
1KX8
ICG13 WS57C49B-45
PILOT SUBCARRIER PROM
2KX8
VISC PHASE CTL S1, 3
ICG17 CX23038
PHASE SHIFT
VISC-INSERT
U/Q. V/I→CR, CB
CHROMINANCE INPUT
ICH23 CX7997
A
B
D
C
ICH18 MB650203
LPF
U/Q
ICH13 CX7997
C1
ICH10 CX7997
C3
MUX
CR
CB
CFP-INSERT
ICG8 1KX8
RANGE ADJUST PROM
ICF10 HC161
I/P FRAME IDENT
ICJ23 CX7997
ICH16 MB650203
LPF
V/I
ICJ13 CX7997
C2
ICJ10 CX7997
C4
ICH6 MB650208
SUBCARRIER GENERATOR
ICF6, G6 74F86
V SWITCH
ICE5, F5, G5 F283
ADD
ICH2 WS57C291-45 & 1KX8
ICH3 MB7128H 1KX4
SINE PROM
COSINE PROM
ICH1 WS57C291-45 & 1KX8
ICH4 MB7128H 1KX4
HUE CONTROL S2, S4
SUB CARRIER GENERATION
ICB4, B8 CXK1206M
FIELD STORE
ICB2, B6 CXK1206M
FIELD STORE
ICA9 CX23038
Y/C DELAY
ICA12 CXK1202S
LINE DELAY
ICB12 CXK1202S
LINE DELAY
IF
HC
ICA3, A7 CXK1206M
FIELD STORE
ICA1, A5 CXK1206M
FIELD STORE
ICC15 CXK1202S
LINE DELAY
ICB15 CXK1202S
LINE DELAY
ICB20, C2
F283
ADD
ICB19, C1
F283
ADD
FRAME SYNCHRONISE A
COLOR FRAMING C
ICE9 MB7114
FRAME IDENT COMPARE PROM
REFERENCE FRAME IDENT
ICC2 HC283
READ TIMING CONTROL
VIDEO PHASE ADJ S16


VISC PHASE CTL
S1, 3
:G13
:49B-45
LOT
ARRIER
ROM
<X8
ICG17
CX23038
PHASE
SHIFT
VISC-INSERT
ICH10
CX7997
MUX
C3
D
CR
C
CB
ICJ10
CX7997
C4
D
C
CFP-INSERT
ICG8
1KX8
RANGE
ADJUST
PROM
ICF10
HC161
I/P FRAME
IDENT
ICB4, B8
CXK1206M
FIELD
STORE
ICB2, B6
CXK1206M
FIELD
STORE
ICA3, A7
CXK1206M
FIELD
STORE
ICA1, A5
CXK1206M
FIELD
STORE
ICA9
CX23038
Y/C
DELAY
ICA12
CXK1202S
LINE
DELAY
ICB12
CXK1202S
LINE
DELAY
IF
ICA14, A15
HC283, LS283
ADD
1/2
INT
ICA19
MB7124E
BLANKING
INSERTION
PROM
512X8
ICA24
CX23038
DELAY
Y O/P
CR O/P
CB O/P
ICC15
CXK1202S
LINE
DELAY
ICB15
CXK1202S
LINE
DELAY
ICB20, C20
F283
ADD
1/2
ICB19, C19
F283
ADD
1/2
INTC
D-PAL/NTSC
ICC22
WS57C291-45
BLANKING
INSERTION
PROM
2KX8
DEMUX
FRAME SYNCHRONISE AND INTERPOLATION
COLOR FRAMING CONTROL
CF6, G6
74F86
V
SWITCH
ICE5, F5, G5
F283
ADD
ICH2
WS57C291-45 & MB7128H
1KX8
ICH3
1KX4
SINE
PROM
COSINE
PROM
ICH1
WS57C291-45 & MB7128H
1KX8
ICH4
1KX4
HUE
CONTROL
S2, S4
ATION
ICC2
HC283
READ
TIMING
CONTROL
VIDEO PHASE
ADJ
S16
REFERENCE
FRAME
IDENT
ICE9
MB7114
FRAME
IDENT
COMPARE
PROM
ICD21
CXB1001
CCIR601
ENCODER
CCIR601 O/P
CCIR 601 ENCODER

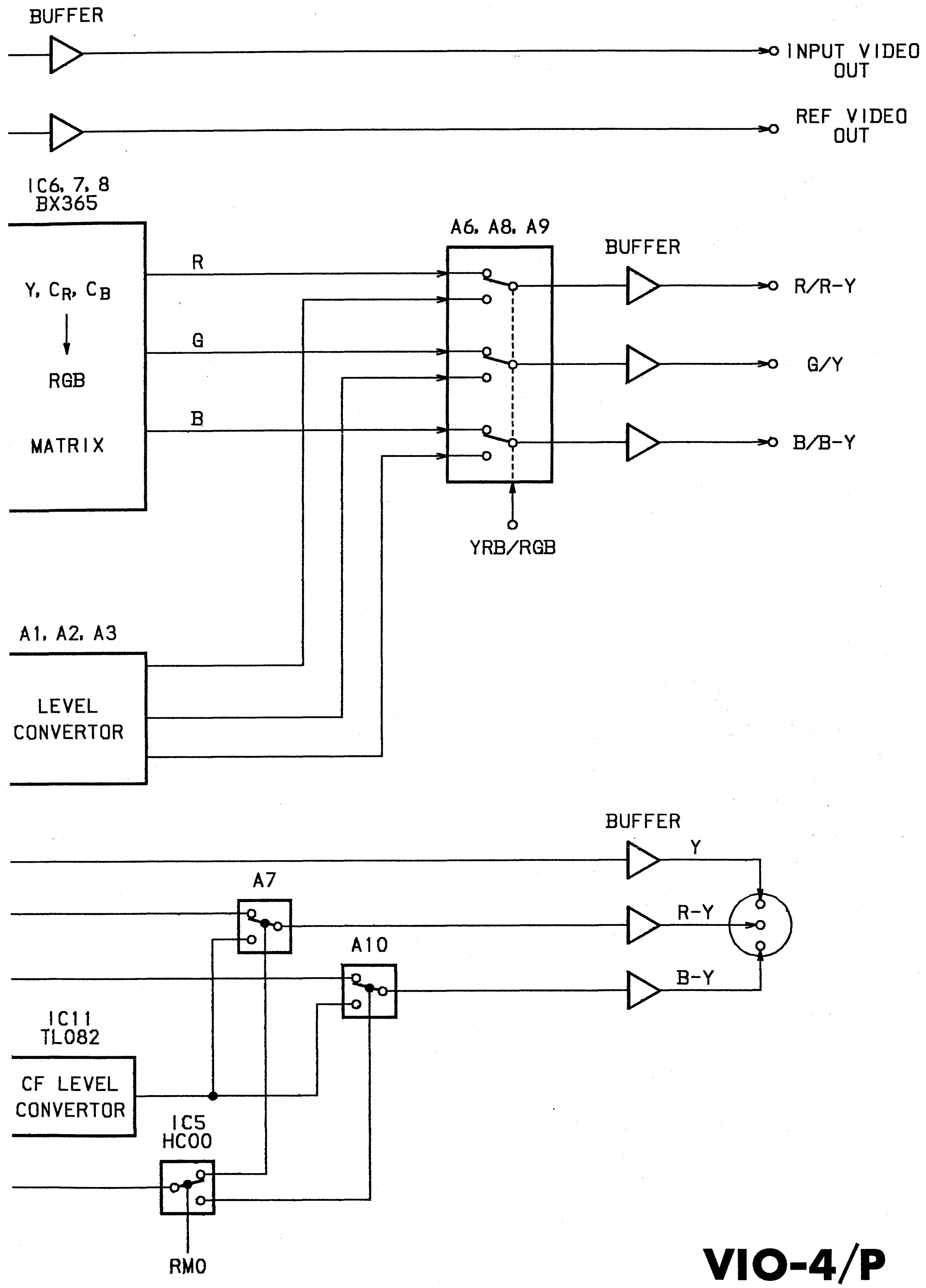
DEC-47/P

BVX-100/100P


INPUT VIDEO IN
BUFFER
INPUT VIDEO OUT
REF VIDEO IN
REF VIDEO OUT
Y
R-Y
B-Y
BUFFER
IC6, 7, 8
BX365
Y, CR, CB
RGB
MATRIX
R
G
B
A6, A8, A9
BUFFER
R/R-Y
G/Y
B/B-Y
YRB/RGB
IC4
BX1333
R SYNC
PULSE SHAPER
A2
ADD
A1, A2, A3
LEVEL CONVERTOR
A4
DUB Y
ADD
BUFFER
Y
A7
R-Y
A10
B-Y
IC11
TL082
CF SIG
CF LEVEL CONVERTOR
IC5
HC00
CF GATE
RMO

VIO-4/P

BVX-100/100P


BUFFER
INPUT VIDEO OUT
REF VIDEO OUT
IC6, 7, 8
BX365
Y, C_R, C_B
RGB
MATRIX
R
G
B
A6, A8, A9
BUFFER
R/R-Y
G/Y
B/B-Y
YRB/RGB
A1, A2, A3
LEVEL CONVERTOR
BUFFER
Y
A7
R-Y
A10
B-Y
IC11
TL082
CF LEVEL CONVERTOR
IC5
HC00
RMO

VIO-4/P

BVX-100/100P

SECTION 6
SEMICONDUCTOR ELECTRODES

ここに記載されている IC, トランジスタ, ダイオードは, それぞれの機能を等価的に表わしたものです。したがって互換性を表わすものではありません。(互換性のない型名が併記されている事もあります。)部品の交換をする時は, SPARE PARTS の章を参照して下さい。

ICs, transistors and diodes whoses functions are equivalent are described here. Therefore, incompatible device names may be described together. For parts replacement, refer to the Spare Parts section in this manual.

IC	PAGE
74ACT374PC	6-3
74F00PC	6-3
74F02PC	6-3
74F04PC	6-3
74F08PC	6-3
74F10PC	6-3
74F153PC	6-3
74F157PC	6-3
74F240PC	6-4
74F244PC	6-4
74F283PC	6-4
74F32PC	6-4
74F374PC	6-4
74F86PC	6-4
AM29821	6-5
BX-1244	6-5
BX-1244A	6-5
BX-1333L	6-5
BX-1463	6-5
BX-365A	6-5
BX-366A	6-5
CD4053BE	6-5
CX20158	6-5
CX20160	6-8
CX23038	6-8
CX23043	6-8
CX23065	6-8
CX773B	6-6
CX7903	6-9
CX7997	6-9
CXB1001G	6-10
CXK1202S	6-11
DG303CJ	6-12
HD10124	6-12
LM317T	6-12
M5F7805	6-12
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MB4002	6-12
MB40578P	6-12
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MB650203	6-24
MB650205	6-13
MB650207	6-25
MB652208	6-14
MB7114H	6-15
MB7118H	6-15
MB7122E	6-15
MB7122H	6-15
MB7124	6-15
MB7124EZ	6-15
MB7124HZ	6-15
MB7128H	6-16
MB7152H	6-16
MC1496P	6-16
MC1595L	6-16
MC74F153N	6-3
MC74F74N	6-16
MC74HC164N	6-16
MC74HC174N	6-17
NJM7805A	6-17
NJM7905A	6-17
SN7406N	6-17
SN7417N	6-17
SN74HC00N	6-17
SN74HC02N	6-17
SN74HC04N	6-17
SN74HC08N	6-18
SN74HC10N	6-18
SN74HC11N	6-18
SN74HC133N	6-18
SN74HC153N	6-18
SN74HC157N	6-18
SN74HC161N	6-19
SN74HC163N	6-19
SN74HC164N	6-16
SN74HC174N	6-17
SN74HC175N	6-19
SN74HC244N	6-19
SN74HC273N	6-19
SN74HC30N	6-20
SN74HC32N	6-20
SN74HC367N	6-20
SN74HC374N	6-3
SN74HC688N	6-20
SN74HC74N	6-20
SN74HC85N	6-20
SN74HC86N	6-21
SN74LS04N	6-3
SN74LS06N	6-17
SN74ALS08N	6-3
SN74LS10N	6-3
SN74LS123N	6-21
SN74LS283N	6-4
SN74LS669N	6-21
SN74S240N	6-4
SN74S244N	6-4
SN75207BN	6-21
TA7357AP	6-21
TC4040BP	6-21
TC4066BP	6-21
TC4066BPHB	6-22
TC74HC00P	6-17
TC74HC02P	6-17
TC74HC04P	6-17
TC74HC08P	6-18
TC74HC10P	6-18
TC74HC11P	6-18
TC74HC123P	6-22
TC74HC153P	6-18
TC74HC157P	6-18
TC74HC161P	6-19
TC74HC163P	6-19
TC74HC164P	6-16
TC74HC175P	6-19
TC74HC221P	6-22
TC74HC238P	6-22
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等価回路は IC メーカーの Data Book に従いました。
The circuit diagram of each IC is obtained from the IC data book published by the manufacturer.

IC PAGE

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TC74HC30P 6-20
TC74HC32P 6-20
TC74HC367P 6-20
TC74HC374P 6-3
TC74HC688P 6-20
TC74HC85P 6-20
TC74HC86P 6-21
TL082CP 6-22
TL431CLPB 6-22
TL431CP 6-22
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UPC393C 6-22
UPC7805H 6-17
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2SA1175F 6-26
2SB733 6-26
2SC2785F 6-26
2SC2901 6-26
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DIODE PAGE

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1SS119 6-26
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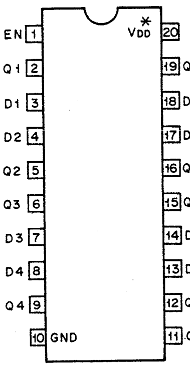
LT9010H 6-26

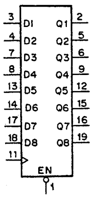
DIODE PAGE

LT9010N2 6-26
RD??ESB? 6-26
TLG124 6-26
TLR124 6-26

74ACT374PC (FSC) (*V_{DD} ; +2 to +6V)
SN74HC374N (TI) (*V_{DD} ; +2 to +6V)
TC74HC374P (TOSHIBA) (*V_{DD} ; +2 to +6V)

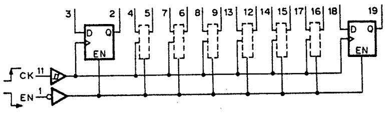
C-MOS 3-STATE OCTAL D-TYPE FLIP-FLOP
– TOP VIEW –


EN 1
Q1 2
D1 3
D2 4
Q2 5
Q3 6
D3 7
D4 8
Q4 9
10 GND
*
VDD 20
19 Q8
18 D8
17 D7
16 Q7
15 Q6
14 D6
13 D5
12 Q5
11 CK

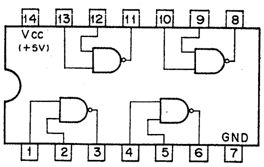

3 DI
4 D2
7 D3
8 D4
13 D5
14 D6
17 D7
18 D8
11
Q1 2
Q2 5
Q3 6
Q4 9
Q5 12
Q6 15
Q7 16
Q8 19
EN
1

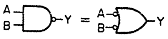
INPUTS			OUT
EN	D	CK	Q
0	1	ʃ	1
0	0	ʃ	0
0	X	0	Qo
1	X	X	HI-Z

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


3
2
4
5
7
6
8
9
13
12
14
15
17
16
18
19
D
Q
EN
CK 11
EN 1

74F00PC (FSC)
TTL 2-INPUT POSITIVE-NAND GATE
— TOP VIEW —


14
13
12
11
10
9
8
Vcc
(+5V)
GND
1
2
3
4
5
6
7



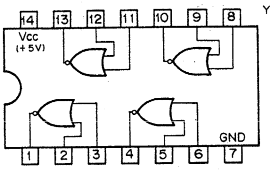
$Y = \overline{A \cdot B} = \overline{A} + \overline{B}$

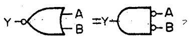
A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

74F02PC (FSC)

TTL 2-INPUT POSITIVE-NOR GATE
– TOP VIEW –


14
13
12
11
10
9
8
Vcc
(+5V)
GND
1
2
3
4
5
6
7



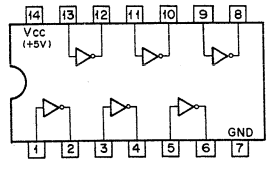
$Y = \overline{A + B} = \overline{A} \cdot \overline{B}$

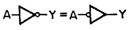
A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0:LOW LEVEL
1;HIGH LEVEL

74F04PC (FSC)
SN74LS04N (TI)

TTL INVERTER
– TOP VIEW –


14
13
12
11
10
9
8
Vcc
(+5V)
GND
1
2
3
4
5
6
7



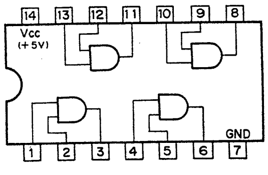
$Y = \overline{A}$

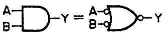
A	Y
0	1
1	0

0;LOW LEVEL
1;HIGH LEVEL

74F08PC (FSC)
SN74ALS08N (TI)

TTL 2-INPUT POSITIVE-AND GATE
– TOP VIEW –


14
13
12
11
10
9
8
Vcc
(+5V)
GND
1
2
3
4
5
6
7



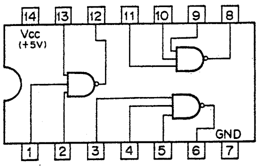
$Y = A \cdot B = \overline{\overline{A} + \overline{B}}$

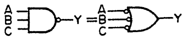
A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

74F10PC (FSC)
SN74LS10N (TI)

TTL 3-INPUT POSITIVE NAND GATE
– TOP VIEW –


14
13
12
11
10
9
8
Vcc
(+5V)
GND
1
2
3
4
5
6
7



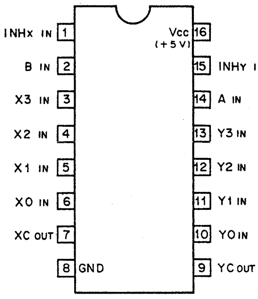
$Y = \overline{ABC} = \overline{A} + \overline{B} + \overline{C}$

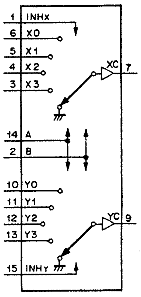
A	B	C	Y
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0

0 : LOW LEVEL
1 : HIGH LEVEL

74F153PC (FSC)
MC74F153N (MOTOROLA)

TTL 4-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
— TOP VIEW —

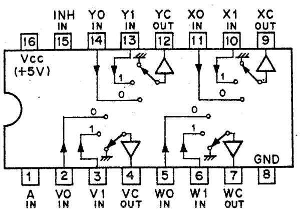

INHx IN 1
B IN 2
X3 IN 3
X2 IN 4
X1 IN 5
X0 IN 6
XC OUT 7
8 GND
Vcc (+5V) 16
15 INHY IN
14 A IN
13 Y3 IN
12 Y2 IN
11 Y1 IN
10 Y0 IN
9 YC OUT

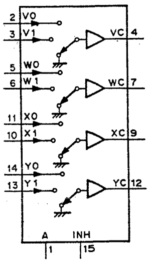

1 INHX
6 X0
5 X1
4 X2
3 X3
XC 7
14 A
2 B
10 Y0
11 Y1
12 Y2
13 Y3
YC 9
15 INHY

CONTROL IN			ON CHANNEL
INH	B	A	
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	X	X	GND

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

74F157PC (FSC)
TTL 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
— TOP VIEW —


INH IN
Y0 IN
Y1 IN
YC OUT
X0 IN
X1 IN
XC OUT
16
15
14
13
12
11
10
9
Vcc
(+5V)
1
0
GND
1
2
3
4
5
6
7
8
A IN
V0 IN
V1 IN
VC OUT
W0 IN
W1 IN
WC OUT

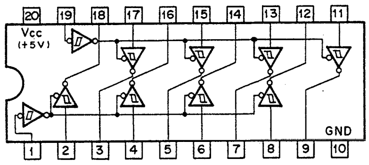

2 V0
3 V1
VC 4
5 W0
6 W1
WC 7
11 X0
10 X1
XC 9
14 Y0
13 Y1
YC 12
A
INH
1
15

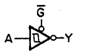
CONT. IN		ON CHANNEL
INH	A	
0	0	0
0	1	1
1	X	GND

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

74F240PC (FSC)
SN74S240N (TI)

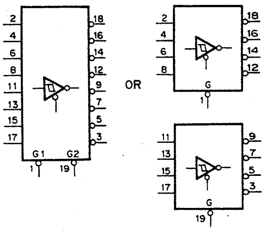
TTL 3-STATE SCHMITT TRIGGER INVERTER/LINE DRIVER
– TOP VIEW –


20
19
18
17
16
15
14
13
12
11
Vcc
(+5V)
GND
1
2
3
4
5
6
7
8
9
10



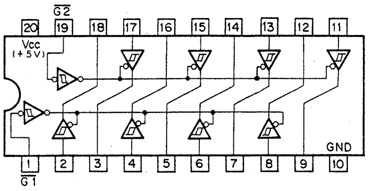
G̅	A	Y
0	0	1
0	1	0
1	X	HI-Z

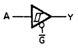
0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE
HI-Z;HIGH IMPEDANCE


2
4
6
8
11
13
15
17
18
16
14
12
9
7
5
3
G1
G2
1
19
OR
2
4
6
8
18
16
14
12
G
1
11
13
15
17
9
7
5
3
G
19

74F244PC (FSC)
SN74S244N (TI)

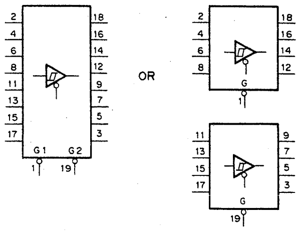
TTL 3-STATE SCHMITT TRIGGER BUFFER/DRIVER
– TOP VIEW –


G̅2
20
19
18
17
16
15
14
13
12
11
Vcc
(+5V)
GND
1
2
3
4
5
6
7
8
9
10
G̅1



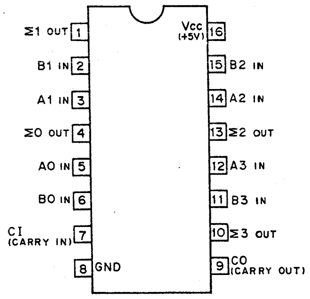
G̅	A	Y
0	0	0
0	1	1
1	X	HI-Z

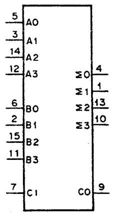
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE


2
4
6
8
11
13
15
17
18
16
14
12
9
7
5
3
G1
G2
1
19
OR
2
4
6
8
18
16
14
12
G
1
11
13
15
17
9
7
5
3
G
19

74F283PC (FSC)
SN74LS283N (TI)

TTL 4-BIT BINARY FULL ADDER
— TOP VIEW —

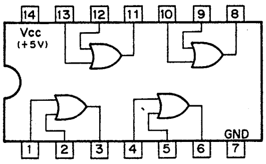

Σ1 OUT 1
B1 IN 2
A1 IN 3
Σ0 OUT 4
A0 IN 5
B0 IN 6
CI (CARRY IN) 7
8 GND
Vcc (+5V) 16
15 B2 IN
14 A2 IN
13 Σ2 OUT
12 A3 IN
11 B3 IN
10 Σ3 OUT
9 CO (CARRY OUT)

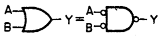

5 A0
3 A1
14 A2
12 A3
6 B0
2 B1
15 B2
11 B3
7 CI
Σ0 4
Σ1 1
Σ2 13
Σ3 10
CO 9

	2^4	2^3	2^2	2^1	2^0	DIGIT
					CI	CARRY IN
		A3	A2	A1	A0	DATA A IN
+)		B3	B2	B1	B0	DATA B IN
	CO	Σ3	Σ2	Σ1	Σ0	CARRY&SUM OUT
EX.					1	CI
		1	0	1	1	A
+)		1	0	1	0	B
	1	0	1	1	0	OUTPUTS
	CO	Σ3	Σ2	Σ1	Σ0	

74F32PC (FSC)

TTL 2-INPUT POSITIVE-OR GATE
— TOP VIEW —


14
13
12
11
10
9
8
Vcc
(+5V)
GND
1
2
3
4
5
6
7



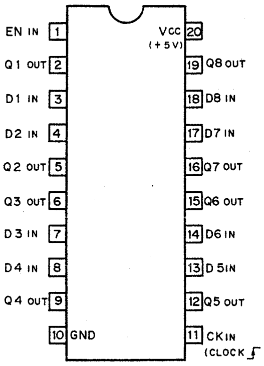
Y = A + B = $\overline{\overline{A}\cdot\overline{B}}$

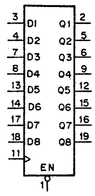
A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0;LOW LEVEL
1;HIGH LEVEL

74F374PC (FSC)

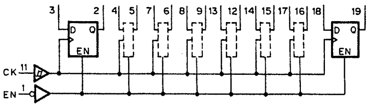
TTL 3-STATE OUTPUTS OCTAL D-TYPE FLIP-FLOP
— TOP VIEW —


EN IN 1
Q1 OUT 2
D1 IN 3
D2 IN 4
Q2 OUT 5
Q3 OUT 6
D3 IN 7
D4 IN 8
Q4 OUT 9
10 GND
Vcc (+5V) 20
19 Q8 OUT
18 D8 IN
17 D7 IN
16 Q7 OUT
15 Q6 OUT
14 D6 IN
13 D5 IN
12 Q5 OUT
11 CK IN (CLOCK ↑)

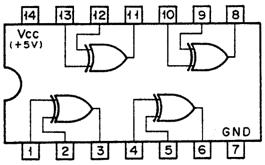

3 D1
4 D2
7 D3
8 D4
13 D5
14 D6
17 D7
18 D8
11
Q1 2
Q2 5
Q3 6
Q4 9
Q5 12
Q6 15
Q7 16
Q8 19
EN
1

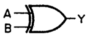
INPUTS			OUT
EN	D	CK	Q
0	1	↑	1
0	0	↑	0
0	X	0	Qo
1	X	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z;HIGH IMPEDANCE


3
2
4
5
7
6
8
9
13
12
14
15
17
16
18
19
D
Q
EN
CK 11
EN 1

74F86PC (FSC)
TTL EXCLUSIVE OR GATE
— TOP VIEW —


14
13
12
11
10
9
8
Vcc
(+5V)
GND
1
2
3
4
5
6
7

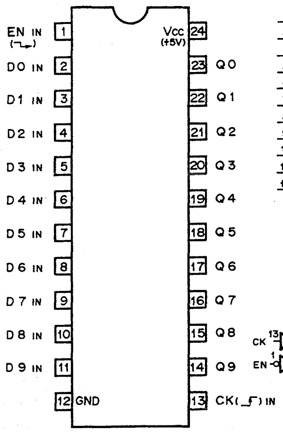


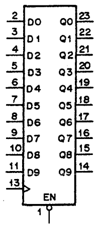
Y = $\overline{A}\cdot B + A\cdot\overline{B}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

0;LOW LEVEL
1;HIGH LEVEL

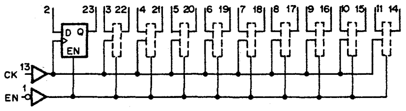
AM29821 (ADVANCED MICRO DEVICE)
3-STATE OUTPUTS 10-BIT D-TYPE FLIP-FLOP
— TOP VIEW —


EN IN 1
D0 IN 2
D1 IN 3
D2 IN 4
D3 IN 5
D4 IN 6
D5 IN 7
D6 IN 8
D7 IN 9
D8 IN 10
D9 IN 11
12 GND
Vcc (+5V) 24
23 Q0
22 Q1
21 Q2
20 Q3
19 Q4
18 Q5
17 Q6
16 Q7
15 Q8
14 Q9
13 CK( ) IN

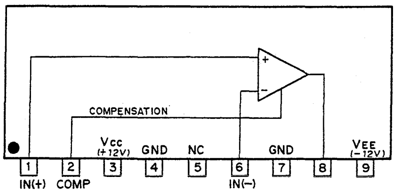

D0 Q0
D1 Q1
D2 Q2
D3 Q3
D4 Q4
D5 Q5
D6 Q6
D7 Q7
D8 Q8
D9 Q9
EN

INPUTS			OUT
EN	D	CK	Q
0	1	↑	1
0	0	↑	0
0	X	0	Qo
1	X	X	HI-Z

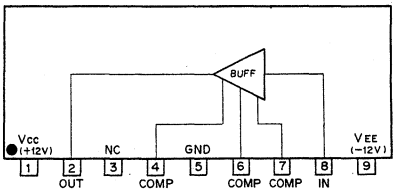
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE


D Q
EN
CK 13
EN 1

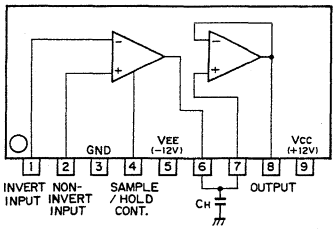
BX365A (SONY)
VIDEO AMPLIFIER
— SIDE VIEW —


COMPENSATION
Vcc (+12V)
GND
NC
GND
VEE (-12V)
1 IN(+)
2 COMP
6 IN(−)

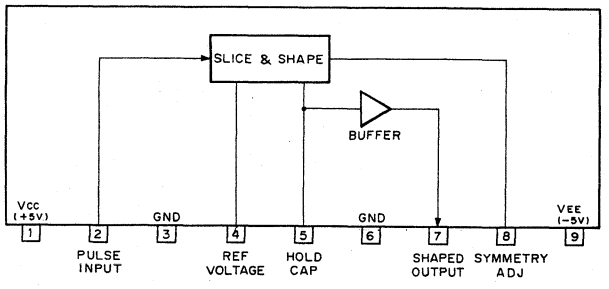
BX366A (SONY)
VIDEO BUFFER
— SIDE VIEW —


BUFF
Vcc (+12V)
NC
GND
VEE (-12V)
2 OUT
4 COMP
6 COMP
7 COMP
8 IN

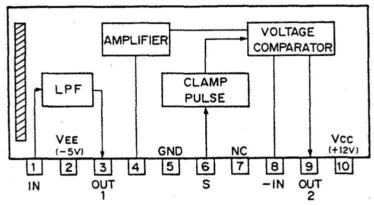
BX1244 (SONY)
BX1244A (SONY)
SAMPLE AND HOLD.
— PRINTED SIDE VIEW —


GND
VEE (-12V)
Vcc (+12V)
INVERT INPUT
NON-INVERT INPUT
SAMPLE / HOLD CONT.
CH
OUTPUT

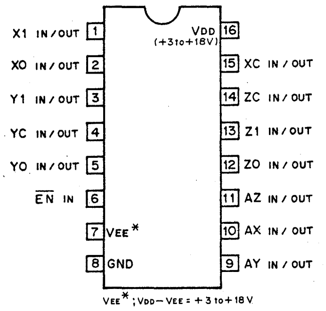
BX1333L (SONY)
PULSE SHAPER
— PRINTED SIDE VIEW —

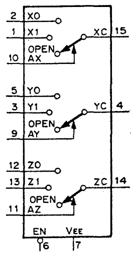

SLICE & SHAPE
BUFFER
Vcc (+5V)
GND
GND
VEE (-5V)
PULSE INPUT
REF VOLTAGE
HOLD CAP
SHAPED OUTPUT
SYMMETRY ADJ

BX1463 (ROHM)
PHASE DETECTOR
– PRINTED SIDE VIEW –


AMPLIFIER
VOLTAGE COMPARATOR
LPF
CLAMP PULSE
VEE (-5V)
GND
NC
Vcc (+12V)
IN
OUT 1
S
–IN
OUT 2

CD4053BE (RCA)
C-MOS 2-CHANNEL MULTIPLEXER/DEMULTIPLEXER
— TOP VIEW —

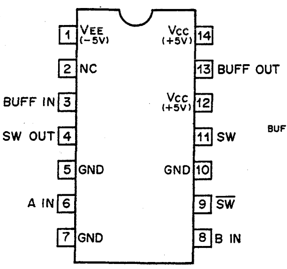

X1 IN/OUT 1
X0 IN/OUT 2
Y1 IN/OUT 3
YC IN/OUT 4
Y0 IN/OUT 5
EN IN 6
7 VEE*
8 GND
VDD (+3to+18V) 16
15 XC IN/OUT
14 ZC IN/OUT
13 Z1 IN/OUT
12 Z0 IN/OUT
11 AZ IN/OUT
10 AX IN/OUT
9 AY IN/OUT
VEE*; VDD−VEE = +3 to+18 V

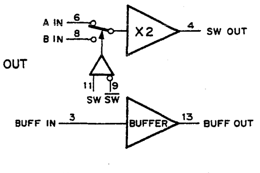

X0
X1
OPEN
AX
XC
Y0
Y1
OPEN
AY
YC
Z0
Z1
OPEN
AZ
ZC
EN
VEE

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE.

CONT. INPUTS		ON CHANNEL
EN	A (X,Y,Z,)	
0	0	0
0	1	1
1	X	OPEN

CX20158 (SONY)
VIDEO SWITCHER AND BUFFER
— TOP VIEW —

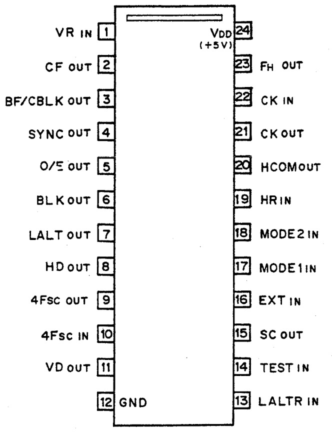

1 VEE (-5V)
2 NC
BUFF IN 3
SW OUT 4
5 GND
A IN 6
7 GND
Vcc (+5V) 14
13 BUFF OUT
Vcc (+5V) 12
11 SW
GND 10
9 SW
8 B IN

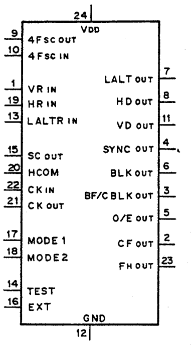

A IN 6
B IN 8
X2
4 SW OUT
11 9
SW SW
BUFF IN 3
BUFFER
13 BUFF OUT

SW	SW	INPUT
0	0	—
0	1	B
1	0	A
1	1	—

0 ;LOW LEVEL
1 ;HIGH LEVEL
– ;INDEFINITE

CX773B (SONY)
C-MOS SYNC GENERATOR (NTSC, PAL-M, PAL, SECAM)
— TOP VIEW —


VR IN 1
CF OUT 2
BF/CBLK OUT 3
SYNC OUT 4
O/E OUT 5
BLK OUT 6
LALT OUT 7
HD OUT 8
4Fsc OUT 9
4Fsc IN 10
VD OUT 11
12 GND
13 LALTR IN
14 TEST IN
15 SC OUT
16 EXT IN
17 MODE1 IN
18 MODE2 IN
19 HR IN
20 HCOM OUT
21 CK OUT
22 CK IN
23 FH OUT
24 VDD (+5V)


24 VDD
9 4Fsc OUT
10 4Fsc IN
1 VR IN
19 HR IN
13 LALTR IN
15 SC OUT
20 HCOM
22 CK IN
21 CK OUT
17 MODE 1
18 MODE 2
14 TEST
16 EXT
12 GND
LALT OUT 7
HD OUT 8
VD OUT 11
SYNC OUT 4
BLK OUT 6
BF/CBLK OUT 3
O/E OUT 5
CF OUT 2
FH OUT 23

O/E : ODD/EVEN FIELD
CF : COLOR FRAME PULSE
HCOM : H COMPARATOR

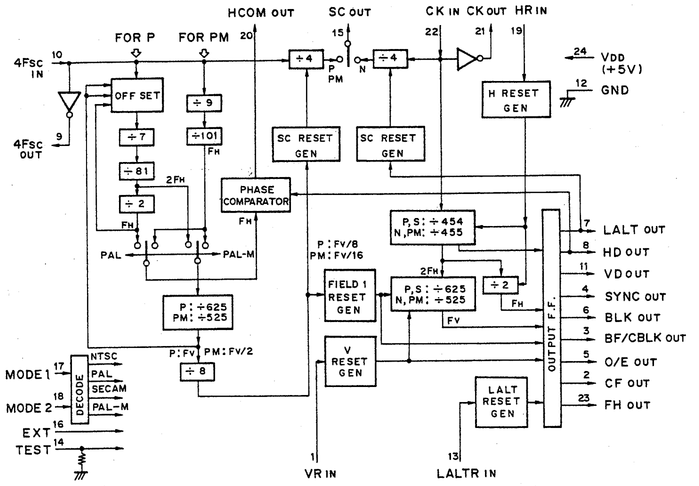
SYSTEM	4Fsc	CLOCK
NTSC	910 FH	910 FH
PAL	1135 FH+2Fv	908 FH
PALM	909 FH	910 FH
SECAM	———	908 FH

INPUTS		SYSTEM
MODE 1	MODE 2	
0	0	NTSC
0	1	SECAM
1	0	PALM
1	1	PAL

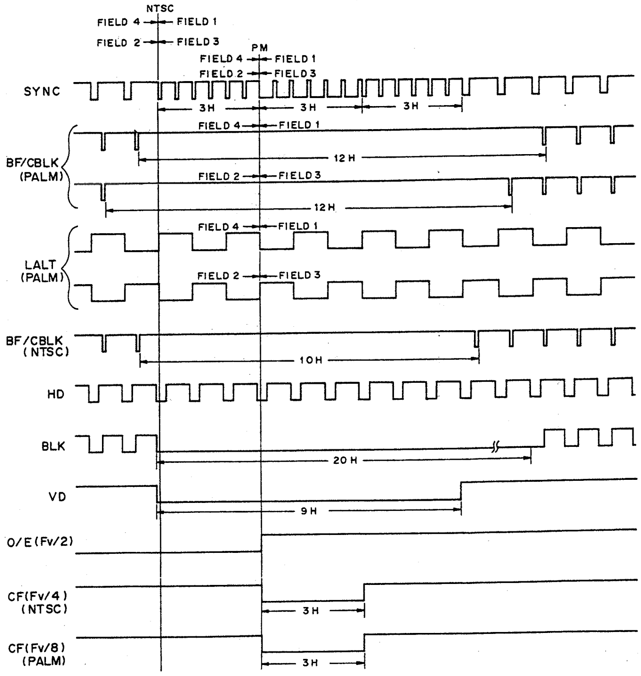
0 ; LOW LEVEL (GND)
1 ; HIGH LEVEL (VDD)

INPUTS		FUNCTION
EXT	TEST	
0	0	INTERNAL
0	1	INVALID
1	0	EXT
1	1	TEST

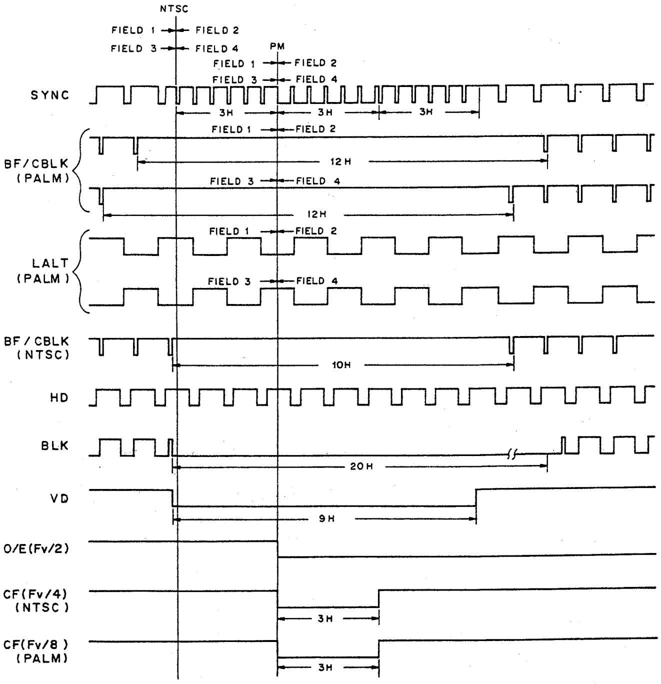
TEST "0": OPEN (INTERNALLY PULLED DOWN)

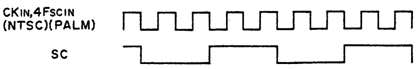

HCOM OUT
SC OUT
CK IN
CK OUT
HR IN
FOR P
FOR PM
20
15
22
21
19
4Fsc IN 10
4Fsc OUT 9
÷4
P
PM
N
÷4
24 VDD (+5V)
12 GND
OFF SET
÷9
÷7
÷101
FH
÷81
2FH
÷2
FH
PHASE COMPARATOR
FH
SC RESET GEN
SC RESET GEN
H RESET GEN
PAL
PAL-M
P, S: ÷454
N, PM: ÷455
P: FV/8
PM: FV/16
2FH
FIELD 1 RESET GEN
P, S: ÷625
N, PM: ÷525
÷2
FH
FV
P: ÷625
PM: ÷525
P: FV
PM: FV/2
÷8
V RESET GEN
LALT RESET GEN
OUTPUT F.F.
MODE 1 17
MODE 2 18
DECODE
NTSC
PAL
SECAM
PAL-M
EXT 16
TEST 14
1 VR IN
13 LALTR IN
7 LALT OUT
8 HD OUT
11 VD OUT
4 SYNC OUT
6 BLK OUT
3 BF/CBLK OUT
5 O/E OUT
2 CF OUT
23 FH OUT

NTSC, PAL-M (FIELD 1,3)

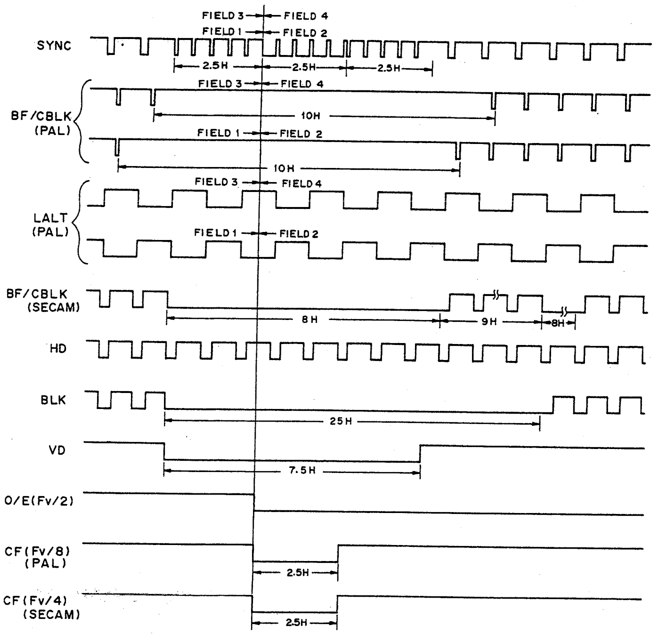

NTSC
FIELD 4 → FIELD 1
FIELD 2 → FIELD 3
PM
FIELD 4 → FIELD 1
FIELD 2 → FIELD 3
SYNC
3H
3H
3H
BF/CBLK (PALM)
FIELD 4 → FIELD 1
12H
FIELD 2 → FIELD 3
12H
LALT (PALM)
FIELD 4 → FIELD 1
FIELD 2 → FIELD 3
BF/CBLK (NTSC)
10H
HD
BLK
20H
VD
9H
O/E (Fv/2)
CF (Fv/4) (NTSC)
3H
CF (Fv/8) (PALM)
3H

NTSC, PAL—M (FIELD 2,4)

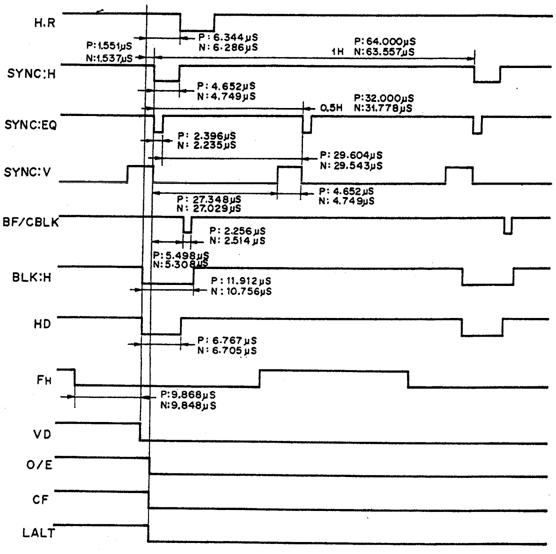

NTSC
FIELD 1 → FIELD 2
FIELD 3 → FIELD 4
PM
FIELD 1 → FIELD 2
FIELD 3 → FIELD 4
SYNC
3H
3H
3H
BF/CBLK (PALM)
FIELD 1 → FIELD 2
12H
FIELD 3 → FIELD 4
12H
LALT (PALM)
FIELD 1 → FIELD 2
FIELD 3 → FIELD 4
BF/CBLK (NTSC)
10H
HD
BLK
20H
VD
9H
O/E (Fv/2)
CF (Fv/4) (NTSC)
3H
CF (Fv/8) (PALM)
3H


CKIN, 4FscIN (NTSC)(PALM)
SC

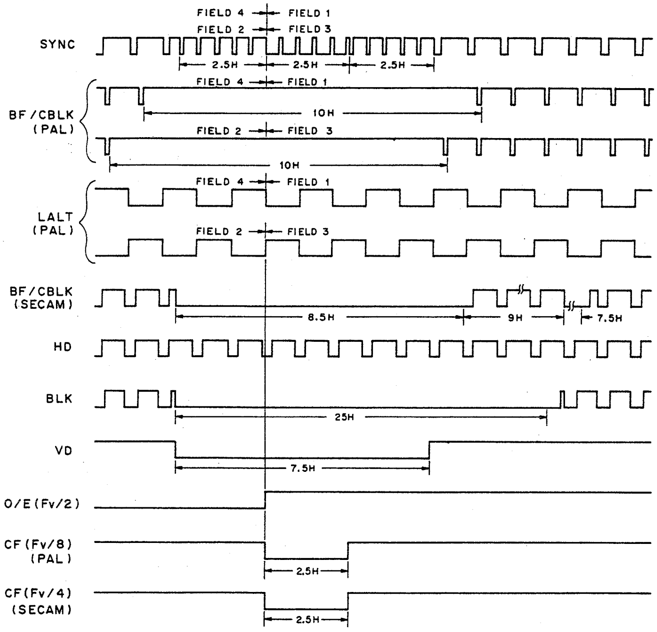
PAL, SECAM (FIELD 4, 2)

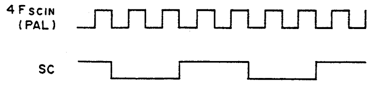

FIELD 3 → ← FIELD 4
FIELD 1 → ← FIELD 2
SYNC
2.5H
2.5H
2.5H
FIELD 3 → ← FIELD 4
BF/CBLK (PAL)
10H
FIELD 1 → ← FIELD 2
10H
FIELD 3 → ← FIELD 4
LALT (PAL)
FIELD 1 → ← FIELD 2
BF/CBLK (SECAM)
8H
9H
8H
HD
BLK
25H
VD
7.5H
O/E (Fv/2)
CF (Fv/8) (PAL)
2.5H
CF (Fv/4) (SECAM)
2.5H

P: PAL, SECAM
N: NTSC, PALM

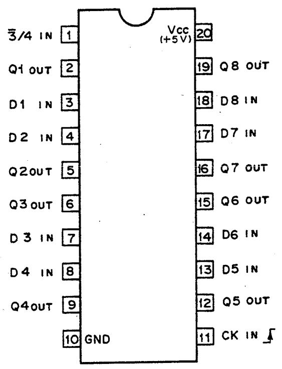

H.R
P: 6.344μS
N: 6.286μS
P: 1.551μS
N: 1.537μS
P: 64.000μS
1H N: 63.557μS
SYNC:H
P: 4.652μS
N: 4.749μS
P: 32.000μS
0.5H N: 31.778μS
SYNC:EQ
P: 2.396μS
N: 2.235μS
P: 29.604μS
N: 29.543μS
SYNC:V
P: 4.652μS
N: 4.749μS
P: 27.348μS
N: 27.029μS
BF/CBLK
P: 2.256μS
N: 2.514μS
P: 5.498μS
N: 5.306μS
BLK:H
P: 11.912μS
N: 10.756μS
HD
P: 6.767μS
N: 6.705μS
FH
P: 9.868μS
N: 9.848μS
VD
O/E
CF
LALT

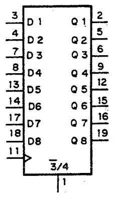
PAL, SECAM (FIELD 1, 3)


FIELD 4 → ← FIELD 1
FIELD 2 → ← FIELD 3
SYNC
2.5H
2.5H
2.5H
FIELD 4 → ← FIELD 1
BF/CBLK (PAL)
10H
FIELD 2 → ← FIELD 3
10H
FIELD 4 → ← FIELD 1
LALT (PAL)
FIELD 2 → ← FIELD 3
BF/CBLK (SECAM)
8.5H
9H
7.5H
HD
BLK
25H
VD
7.5H
O/E (Fv/2)
CF (Fv/8) (PAL)
2.5H
CF (Fv/4) (SECAM)
2.5H


4FSCIN (PAL)
SC

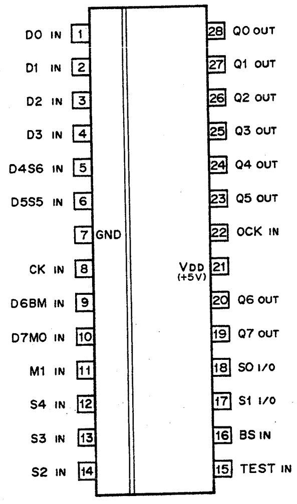
CX20160 (SONY)
TTL OCTAL 3 OR 4 STAGE SHIFT REGISTER
— TOP VIEW —

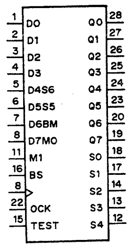

3̄/4 IN 1
Q1 OUT 2
D1 IN 3
D2 IN 4
Q2OUT 5
Q3 OUT 6
D3 IN 7
D4 IN 8
Q4OUT 9
10 GND
Vcc (+5V) 20
19 Q8 OUT
18 D8 IN
17 D7 IN
16 Q7 OUT
15 Q6 OUT
14 D6 IN
13 D5 IN
12 Q5 OUT
11 CK IN


3 D1 Q1 2
4 D2 Q2 5
7 D3 Q3 6
8 D4 Q4 9
13 D5 Q5 12
14 D6 Q6 15
17 D7 Q7 16
18 D8 Q8 19
11
3̄/4
1

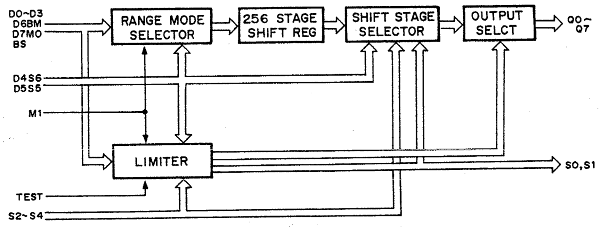
3/4; TOTAL STAGE SELECTION SIGNAL INPUT
H: 4 STAGES, L: 3 STAGES

CX23038 (SONY)
C-MOS PROGRAMABLE SHIFT REGISTER
— TOP VIEW —

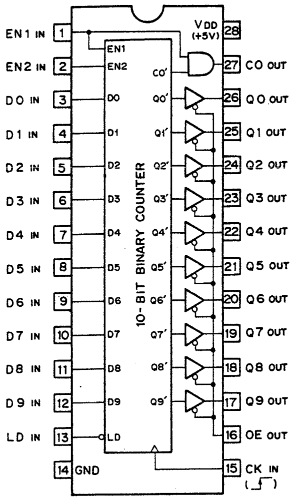

D0 IN 1
D1 IN 2
D2 IN 3
D3 IN 4
D4S6 IN 5
D5S5 IN 6
7 GND
CK IN 8
D6BM IN 9
D7MO IN 10
M1 IN 11
S4 IN 12
S3 IN 13
S2 IN 14
28 Q0 OUT
27 Q1 OUT
26 Q2 OUT
25 Q3 OUT
24 Q4 OUT
23 Q5 OUT
22 OCK IN
VDD (+5V) 21
20 Q6 OUT
19 Q7 OUT
18 S0 I/O
17 S1 I/O
16 BS IN
15 TEST IN

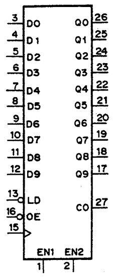

1 D0 Q0 28
2 D1 Q1 27
3 D2 Q2 26
4 D3 Q3 25
5 D4S6 Q4 24
6 D5S5 Q5 23
7 D6BM Q6 20
8 D7MO Q7 19
11 M1 S0 18
16 BS S1 17
8 S2 14
22 OCK S3 13
15 TEST S4 12

D0~D3 : DATA INPUT
D4S6,D5S5 : DATA/SHIFT SELECT INPUT
S0~S4 : SHIFT SELECT INPUT
Q0~Q7 : DATA OUTPUT
D6BM : DATA/BIT SLICE INPUT
D7M0,M1 : DATA/RANGE MODE INPUT
BS : DATA/BIT SLICE CHANGE INPUT
CK : MAIN CLOCK
OCK : OUTPUT CLOCK
TEST : LIMITER SELECT INPUT


D0~D3
D6BM
D7MO
BS
RANGE MODE SELECTOR
256 STAGE SHIFT REG
SHIFT STAGE SELECTOR
OUTPUT SELCT
Q0~Q7
D4S6
D5S5
M1
LIMITER
S0,S1
TEST
S2~S4

CX23043 (SONY)
N-MOS SYNCHRONOUS 10-BIT BINARY COUNTER
— TOP VIEW —


EN1 IN 1
EN2 IN 2
D0 IN 3
D1 IN 4
D2 IN 5
D3 IN 6
D4 IN 7
D5 IN 8
D6 IN 9
D7 IN 10
D8 IN 11
D9 IN 12
LD IN 13
14 GND
VDD (+5V) 28
27 CO OUT
26 Q0 OUT
25 Q1 OUT
24 Q2 OUT
23 Q3 OUT
22 Q4 OUT
21 Q5 OUT
20 Q6 OUT
19 Q7 OUT
18 Q8 OUT
17 Q9 OUT
16 OE OUT
15 CK IN
EN1
EN2
D0
D1
D2
D3
D4
D5
D6
D7
D8
D9
LD
CO'
Q0'
Q1'
Q2'
Q3'
Q4'
Q5'
Q6'
Q7'
Q8'
Q9'
10-BIT BINARY COUNTER


3 D0 Q0 26
4 D1 Q1 25
5 D2 Q2 24
6 D3 Q3 23
7 D4 Q4 22
8 D5 Q5 21
9 D6 Q6 20
10 D7 Q7 19
11 D8 Q8 18
12 D9 Q9 17
13 LD
16 OE
15
CO 27
EN1 EN2
1 2

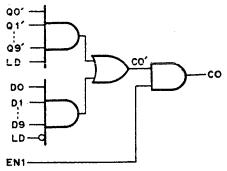
EN1	EN2	LD	FUNCTION
1	1	1	COUNT
0	X	1	NO COUNT
X	0	1	NO COUNT
X	X	0	LOAD

OE	Q0 to Q9 OUTPUT
0	Q0' to Q9'
1	HI-IMPEDANCE

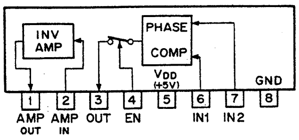
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

Q0 to Q9;	OUTPUTS
Q0' to Q9';	COUNTER OUTPUTS
D0 to D9;	INPUTS DATA
CO;	CARRY OUTPUT
OE;	OUTPUT ENABLE
LD;	INPUT DATA LOAD
EN1;	CLOCK & CARRY OUT ENABLE
EN2;	CLOCK ENABLE
CK;	CLOCK INPUT

CARRY OUTPUT "CO"


Q0'
Q1'
Q9'
LD
D0
D1
D9
LD
CO'
CO
EN1

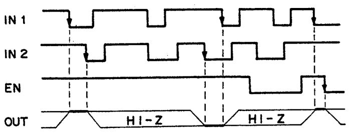
CX23065 (SONY)
N-MOS PHASE COMPARATOR WITH INVERSION AMPLIFIER
— PRINTED SIDE VIEW —


INV AMP
PHASE COMP
VDD (+5V)
GND
1
2
3
4
5
6
7
8
AMP OUT
AMP IN
OUT
EN
IN1
IN2

EN	OUT
1	ACTIVE
0	HIGH IMPEDANCE

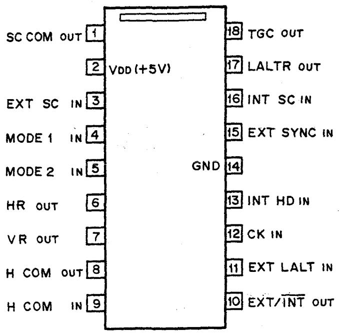
1; HIGH LEVEL
0; LOW LEVEL

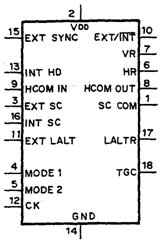
TIMING CHART



HI-Z ; HI-IMPEDANCE

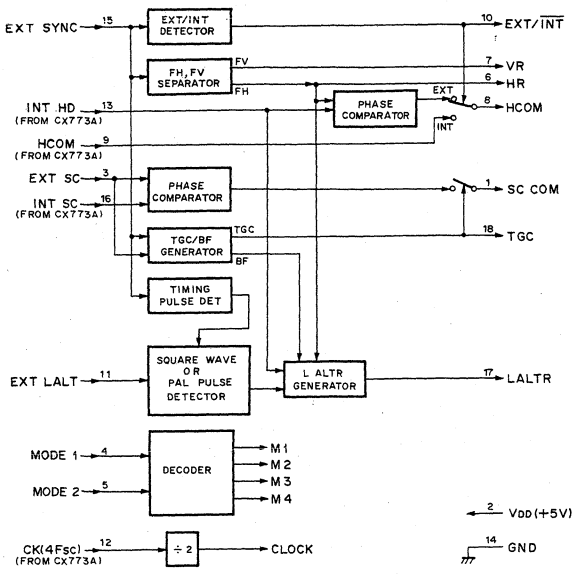
CX7903 (SONY)
C-MOS GENLOCK DRIVER FOR CX773A
— TOP VIEW —


SC COM OUT 1
2 VDD (+5V)
EXT SC IN 3
MODE 1 IN 4
MODE 2 IN 5
HR OUT 6
VR OUT 7
H COM OUT 8
H COM IN 9
18 TGC OUT
17 LALTR OUT
16 INT SC IN
15 EXT SYNC IN
GND 14
13 INT HD IN
12 CK IN
11 EXT LALT IN
10 EXT/INT OUT

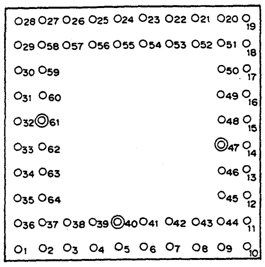

2 VDD
15 EXT SYNC
EXT/INT 10
VR 7
13 INT HD
HR 6
9 HCOM IN
HCOM OUT 8
3 EXT SC
SC COM 1
16 INT SC
11 EXT LALT
LALTR 17
4 MODE 1
TGC 18
5 MODE 2
12 CK
GND 14

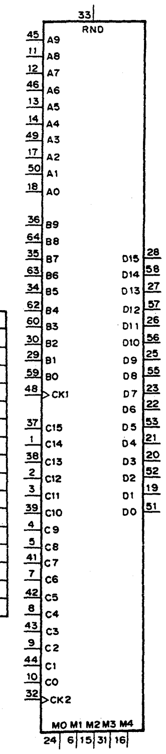
INPUTS		EXT LOCK MODE	
MODE 2	MODE 1		
0	0	M1	PAL : VBS
0	1	M2	PALM : VBS
1	0	M3	PAL : VS/SC/LALT SECAM : VS/SC/LALT
1	1	M4	NTSC : VBS NTSC : VS/SC PALM : VS/SC/LALT

0 ; LOW LEVEL
1 ; HIGH LEVEL

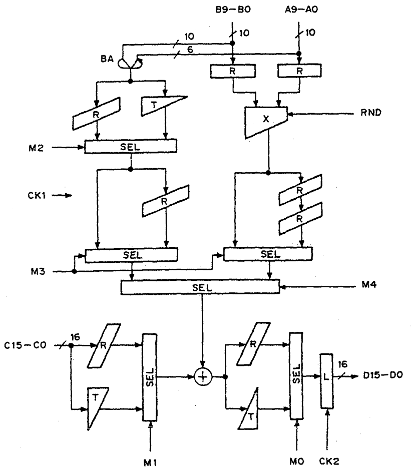

EXT SYNC 15
EXT/INT DETECTOR
10 EXT/INT
FH, FV SEPARATOR
FV
FH
7 VR
6 HR
INT HD 13
(FROM CX773A)
PHASE COMPARATOR
EXT
INT
8 HCOM
HCOM 9
(FROM CX773A)
EXT SC 3
INT SC 16
(FROM CX773A)
PHASE COMPARATOR
1 SC COM
TGC/BF GENERATOR
TGC
BF
18 TGC
TIMING PULSE DET
EXT LALT 11
SQUARE WAVE OR PAL PULSE DETECTOR
L ALTR GENERATOR
17 LALTR
MODE 1 4
MODE 2 5
DECODER
M1
M2
M3
M4
2 VDD (+5V)
14 GND
CK(4Fsc) 12
(FROM CX773A)
÷ 2
CLOCK

CX7997 (SONY)
C-MOS 10x10 BITS 15MHz MULTIPLIER/ADDER
— TOP VIEW —


28 27 26 25 24 23 22 21 20 19
29 58 57 56 55 54 53 52 51 18
30 59 50 17
31 60 49 16
32 61 48 15
33 62 47 14
34 63 46 13
35 64 45 12
36 37 38 39 40 41 42 43 44 11
1 2 3 4 5 6 7 8 9 10


33 RND
45 A9
11 A8
12 A7
46 A6
13 A5
14 A4
49 A3
17 A2
50 A1
18 A0
36 B9
64 B8
35 B7
63 B6
34 B5
62 B4
60 B3
30 B2
29 B1
59 B0
48 CK1
37 C15
1 C14
38 C13
2 C12
3 C11
39 C10
4 C9
5 C8
41 C7
7 C6
42 C5
8 C4
43 C3
9 C2
44 C1
10 C0
32 CK2
D15 28
D14 58
D13 27
D12 57
D11 26
D10 56
D9 25
D8 55
D7 23
D6 22
D5 53
D4 21
D3 20
D2 52
D1 19
D0 51
M0 M1 M2 M3 M4
24 6 15 31 16

P.NO.	I/O	Name	P.NO.	I/O	Name	P.NO.	I/O	Name	P.NO.	I/O	Name
1	I	C14	17	I	A2	33	I	RND	49	I	A3
2	I	C12	18	I	A0	34	I	B5	50	I	A1
3	I	C11	19	O	D1	35	I	B7	51	O	D0
4	I	C9	20	O	D3	36	I	B9	52	O	D2
5	I	C8	21	O	D4	37	I	C15	53	O	D5
6	I	M1	22	O	D6	38	I	C13	54	GND	—
7	I	C6	23	O	D7	39	I	C10	55	O	D8
8	I	C4	24	I	M0	40	GND	—	56	O	D10
9	I	C2	25	O	D9	41	I	C7	57	O	D12
10	I	C0	26	O	D11	42	I	C5	58	O	D14
11	I	A8	27	O	D13	43	I	C3	59	I	B0
12	I	A7	28	O	D15	44	I	C1	60	I	B3
13	I	A5	29	I	B1	45	I	A9	61	VDD (+5V)	—
14	I	A4	30	I	B2	46	I	A6	62	I	B4
15	I	M2	31	I	M3	47	VDD (+5V)	—	63	I	B6
16	I	M4	32	I	CK2	48	I	CK1	64	I	B8

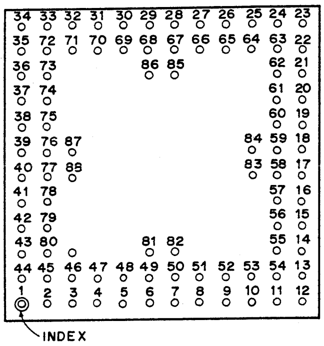

B9–B0
A9–A0
10
10
10
6
BA
R
R
R
T
X
RND
M2
SEL
CK1
R
R
R
SEL
SEL
M3
SEL
M4
C15–C0
16
R
T
SEL
+
R
T
SEL
L
16
D15–D0
M1
M0
CK2

(NOTES) R : REGISTER
L : TRANSPARENT LATCH
T : TRIANGULAR DELAY
SEL : SELECTOR
X : MULTIPLIER
+ : ADDER

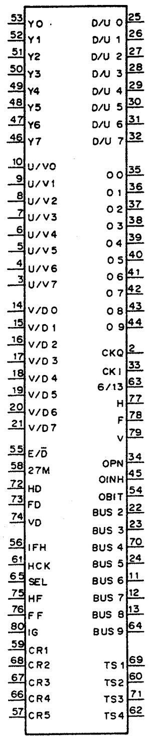
MODE ASSIGNMENT

	0	1
M4	MULTIPLICATION–ADDITION	ADDITION
M3	NO DELAY IS ADDED BEFORE ADDER.	IF M4=0, MULTIPLICATION RESULT IS DELAYED BY 2 CLOCKS. IF M4=1, BA INPUT IS DELAYED BY 1 CLOCK.
M2	A,B,BA INPUTS NEED BIT DELAY.	NO DELAY IS NEEDED FOR A,B,BA INPUTS.
M1	C INPUTS NEEDS BIT DELAY.	NO DELAY IS NEEDED FOR C INPUT.
M0	D OUTPUT HAS BIT DELAY.	D OUTPUT HAS NO BIT DELAY.

CXB1001G (SONY)
4:2:2 PARALLEL INTERFACE FOR 525/625-LINE DIGITAL VIDEO SIGNALS
— TOP VIEW —


34 33 32 31 30 29 28 27 26 25 24 23
35 72 71 70 69 68 67 66 65 64 63 22
36 73 86 85 62 21
37 74 61 20
38 75 60 19
39 76 87 84 59 18
40 77 88 83 58 17
41 78 57 16
42 79 56 15
43 80 81 82 55 14
44 45 46 47 48 49 50 51 52 53 54 13
1 2 3 4 5 6 7 8 9 10 11 12
INDEX

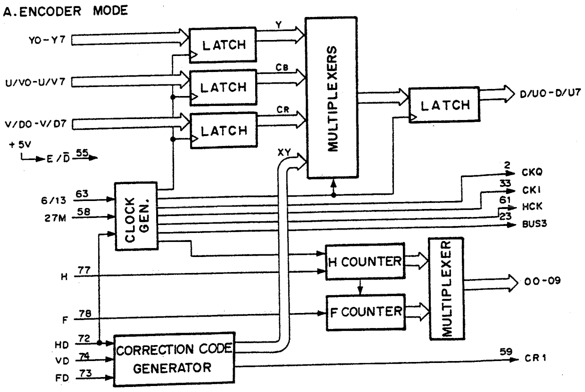
CXB1001G(1/4)


53 Y0
52 Y1
51 Y2
50 Y3
49 Y4
48 Y5
47 Y6
46 Y7
10 U/V0
9 U/V1
8 U/V2
7 U/V3
6 U/V4
5 U/V5
4 U/V6
3 U/V7
14 V/D0
15 V/D1
16 V/D2
17 V/D3
18 V/D4
19 V/D5
20 V/D6
21 V/D7
55 E/D̄
58 27M
72 HD
73 FD
74 VD
56 IFH
61 HCK
65 SEL
75 HF
76 FF
80 IG
59 CR1
68 CR2
67 CR3
66 CR4
57 CR5
D/U 0 25
D/U 1 26
D/U 2 27
D/U 3 28
D/U 4 29
D/U 5 30
D/U 6 31
D/U 7 32
0 0 35
0 1 36
0 2 37
0 3 38
0 4 39
0 5 40
0 6 41
0 7 42
0 8 43
0 9 44
CKQ 2
CKI 33
6/13 63
H 77
F 78
V 79
OPN 34
OINH 45
OBIT 54
BUS 2 22
BUS 3 23
BUS 4 70
BUS 5 24
BUS 6 11
BUS 7 12
BUS 8 13
BUS 9 64
TS1 69
TS2 60
TS3 71
TS4 62

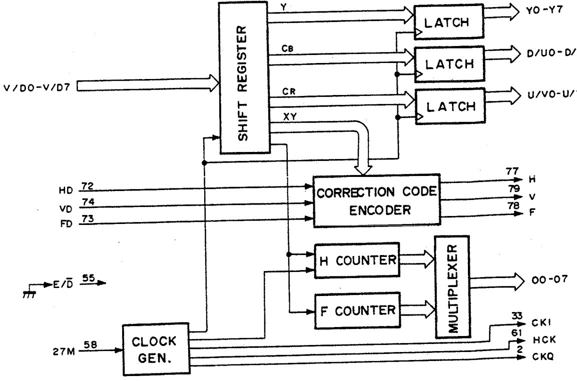
PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1		NC	23	O	BUS3	45	O	OINH	67	I	CR3
2	O	CKQ	24	O	BUS5	46	I/O	Y7	68	I	CR2
3	I/O	U/V7	25	O	D/U0	47	I/O	Y6	69	I	TS1
4	I/O	U/V6	26	O	D/U1	48	I/O	Y5	70	O	BUS4
5	I/O	U/V5	27	O	D/U2	49	I/O	Y4	71	I	TS3
6	I/O	U/V4	28	O	D/U3	50	I/O	Y3	72	I	HD
7	I/O	U/V3	29	O	D/U4	51	I/O	Y2	73	I	FD
8	I/O	U/V2	30	O	D/U5	52	I/O	Y1	74	I	VD
9	I/O	U/V1	31	O	D/U6	53	I/O	Y0	75	I	HF
10	I/O	U/V0	32	O	D/U7	54	O	OBIT	76	I	FF
11	O	BUS6	33	O	CKI	55	I	E/D̄	77	I/O	H
12	O	BUS7	34	O	OPN	56	I	IFH	78	I/O	F
13	O	BUS8	35	O	00	57	I	CR5	79	O	V
14	I	V/D0	36	O	01	58	I	27M	80	I	IG
15	I	V/D1	37	O	02	59	I	CR1	81		Vcc(+5V)
16	I	V/D2	38	O	03	60	I	TS2	82		Vcc(+5V)
17	I	V/D3	39	O	04	61	O	HCK	83		GND
18	I	V/D4	40	O	05	62	I	TS4	84		GND
19	I	V/D5	41	O	06	63	I/O	6/13	85		Vcc(+5V)
20	I	V/D6	42	O	07	64	O	BUS9	86		Vcc(+5V)
21	I	V/D7	43	O	08	65	I	SEL	87		GND
22	O	BUS2	44	O	09	66	I	CR4	88		GND

SYMBOL	FUNCTION	
	ENCODER MODE (E/D̄="H")	DECODER MODE (E/D̄="L")
Y0-Y7	Y SIGNAL INPUTS	Y SIGNAL OUTPUTS
U/V0-U/V7	CB SIGNAL INPUTS	CR SIGNAL OUTPUTS
V/D0-V/D7	CR SIGNAL INPUTS	MULTIPLICATOR DATA INPUTS
D/U0-D/U7	MULTIPLICATOR DATA OUTPUTS	CB SIGNAL OUTPUTS
00-09	EXTERNAL PROM ADDRESS OUTPUTS	
E/D̄	ENCODER/DECODER MODE SELECT INPUT	
27M	CLOCK INPUT (27MHz)	
HD	TIMING SIGNAL INPUTS (H)	
FD	TIMING SIGNAL INPUTS (F)	
VD	TIMING SIGNAL INPUTS (V)	
CKQ	D/U SYNCHRONOUS CLOCK OUTPUT	CR,CB SYNCHRONOUS CLOCK OUTPUT
CKI	INPUT DATA LATCH CLOCK(13.5MHz)	INPUT DATA LATCH CLOCK (27MHz)
6/13	CR,CB SYNCHRONOUS CLOCK INPUT	13.5MHz CLOCK OUTPUT
H	REFERENCE H INPUT	DECODE H OUTPUT
F	REFERENCE F INPUT	DECODE F OUTPUT
V	DECODE V OUTPUT	DECODE V OUTPUT
IFH	CONNECT WITH "+5V"	
HCK	6.75MHz H COUNTER CLOCK OUTPUT	
SEL	CONNECT WITH "+5V"	
HF		
FF		
IG		
CR1-CR5		
TS1-TS4		
OPN	FOR TEST	
OINH		
OBIT		
BUS2-BUS9		

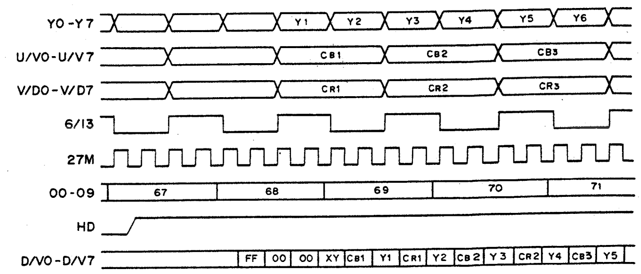
BLOCK DIAGRAMS
A. ENCODER MODE


Y0-Y7
U/V0-U/V7
V/D0-V/D7
+5V
E/D̄ 55
LATCH
LATCH
LATCH
Y
CB
CR
XY
MULTIPLEXERS
LATCH
D/U0-D/U7
6/13 63
27M 58
CLOCK GEN.
2 CKQ
33 CKI
61 HCK
23 BUS3
H 77
F 78
H COUNTER
F COUNTER
MULTIPLEXER
00-09
HD 72
VD 74
FD 73
CORRECTION CODE GENERATOR
59 CR1

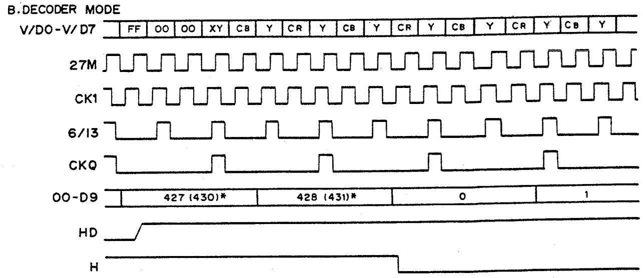
B. DECODER MODE


V/D0-V/D7
SHIFT REGISTER
Y
CB
CR
XY
LATCH
LATCH
LATCH
Y0-Y7
D/U0-D/U7
U/V0-U/V7
HD 72
VD 74
FD 73
CORRECTION CODE ENCODER
77 H
79 V
78 F
E/D̄ 55
H COUNTER
F COUNTER
MULTIPLEXER
00-07
27M 58
CLOCK GEN.
33 CKI
61 HCK
2 CKQ

TIMING CHART
A. ENCODER MODE

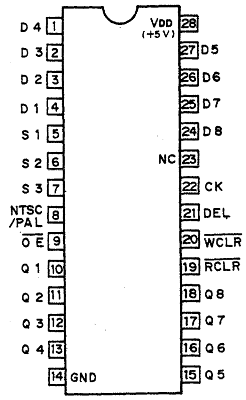

Y0-Y7
Y1
Y2
Y3
Y4
Y5
Y6
U/V0-U/V7
CB1
CB2
CB3
V/D0-V/D7
CR1
CR2
CR3
6/13
27M
00-09
67
68
69
70
71
HD
D/V0-D/V7
FF
00
00
XY
CB1
Y1
CR1
Y2
CB2
Y3
CR2
Y4
CB3
Y5

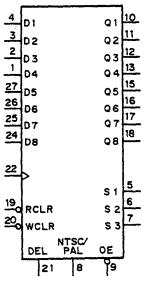
B. DECODER MODE

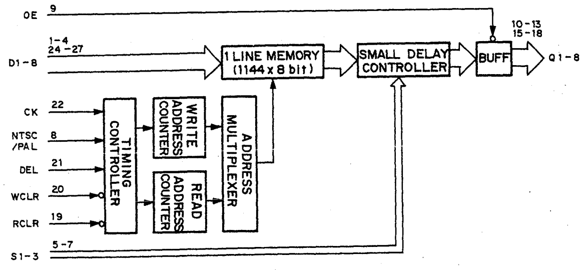

V/D0-V/D7
FF
00
00
XY
CB
Y
CR
Y
CB
Y
CR
Y
CB
Y
CR
Y
CB
Y
27M
CK1
6/13
CKQ
00-D9
427 (430)*
428 (431)*
0
1
HD
H

*; 625-LINE SYSTEM

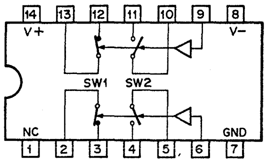
CXK1202S (SONY)
C-MOS DIGITAL DELAY LINE
— TOP VIEW —


D 4 1
D 3 2
D 2 3
D 1 4
S 1 5
S 2 6
S 3 7
NTSC /PAL 8
OE 9
Q 1 10
Q 2 11
Q 3 12
Q 4 13
14 GND
VDD (+5 V) 28
27 D5
26 D6
25 D7
24 D8
NC 23
22 CK
21 DEL
20 WCLR
19 RCLR
18 Q8
17 Q7
16 Q6
15 Q5


4 D1
3 D2
2 D3
1 D4
27 D5
26 D6
25 D7
24 D8
22
19 RCLR
20 WCLR
Q1 10
Q2 11
Q3 12
Q4 13
Q5 15
Q6 16
Q7 17
Q8 18
S1 5
S2 6
S3 7
DEL 21
NTSC/ PAL 8
OE 9

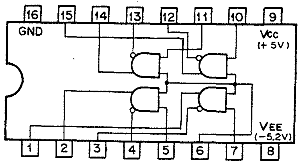

OE 9
D1-8 1-4 24-27
1 LINE MEMORY (1144 x 8 bit)
SMALL DELAY CONTROLLER
BUFF
10-13 15-18
Q1-8
CK 22
NTSC /PAL 8
DEL 21
WCLR 20
RCLR 19
S1-3 5-7
TIMING CONTROLLER
WRITE ADDRESS COUNTER
READ ADDRESS COUNTER
ADDRESS MULTIPLEXER

DG303CJ (SILICONIX)
CMOS ANALOG SWITCH
—TOP VIEW—

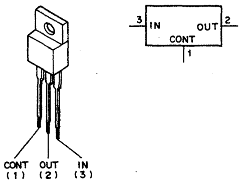

14
13
12
11
10
9
8
V+
V−
SW1
SW2
NC
GND
1
2
3
4
5
6
7

CONT IN	SW1	SW2
0	ON	OFF
1	OFF	ON

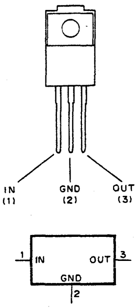
HD10124 (HITACHI)
ECL TTL-TO-ECL TRANSLATOR
— TOP VIEW —


16
15
14
13
12
11
10
9
GND
Vcc (+5V)
VEE (−5.2V)
1
2
3
4
5
6
7
8

LM317T (NSC)
3-TERMINAL ADJUSTABLE REGULATOR

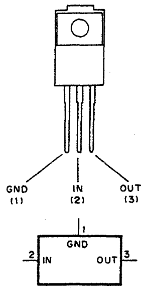

3
IN
OUT
2
CONT
1
CONT (1)
OUT (2)
IN (3)

M5F78 ? ? (MITSUBISHI)
POSITIVE VOLTAGE REGULATOR (1A)
— PRINTED SIDE VIEW —


IN (1)
GND (2)
OUT (3)
1
IN
OUT
3
GND
2

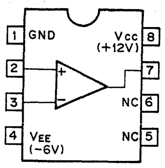
+5V	M5F7805
+6V	M5F7806
+7V	M5F7807
+8V	M5F7808
+9V	M5F7809
+10V	M5F7810
+12V	M5F7812
+15V	M5F7815
+18V	M5F7818
+20V	M5F7820
+24V	M5F7824

M5F79 ? ? (MITSUBISHI)
NEGATIVE VOLTAGE REGULATOR (1A)
— PRINTED SIDE VIEW —

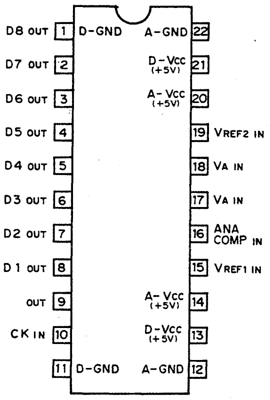

GND (1)
IN (2)
OUT (3)
1
GND
2
IN
OUT
3

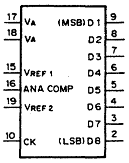
−5V	M5F7905
−6V	M5F7906
−7V	M5F7907
−8V	M5F7908
−9V	M5F7909
−10V	M5F7910
−12V	M5F7912
−15V	M5F7915
−18V	M5F7918
−20V	M5F7920
−24V	M5F7924

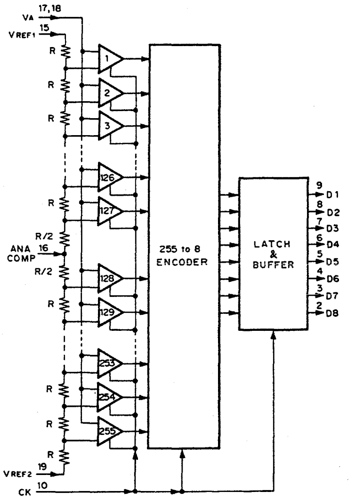
MB4002 (FUJITSU)
HIGH SPEED VOLTAGE COMPARATOR
— TOP VIEW —


1
GND
Vcc (+12V)
8
2
+
7
3
−
NC
6
4
VEE (−6V)
NC
5

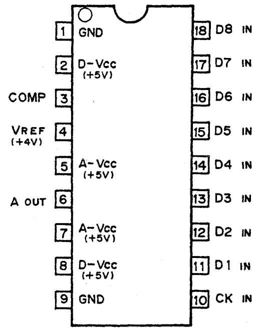
MB40578P (FUJITSU)
8-BIT VIDEO A/D CONVERTER
— TOP VIEW —

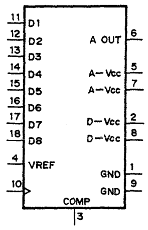

D8 OUT
1
D-GND
A-GND
22
D7 OUT
2
D-Vcc (+5V)
21
D6 OUT
3
A-Vcc (+5V)
20
D5 OUT
4
19
VREF2 IN
D4 OUT
5
18
VA IN
D3 OUT
6
17
VA IN
D2 OUT
7
16
ANA COMP IN
D1 OUT
8
15
VREF1 IN
OUT
9
A-Vcc (+5V)
14
CK IN
10
D-Vcc (+5V)
13
11
D-GND
A-GND
12


17
VA
(MSB) D1
9
18
VA
D2
8
D3
7
15
VREF1
D4
6
16
ANA COMP
D5
5
19
VREF2
D6
4
D7
3
10
CK
(LSB) D8
2

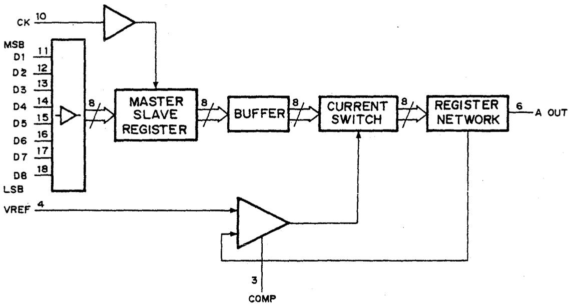

17,18
VA
15
VREF1
R
1
2
3
126
127
R/2
ANA COMP
16
128
129
253
254
255
19
VREF2
10
CK
255 to 8 ENCODER
LATCH & BUFFER
9
D1
8
D2
7
D3
6
D4
5
D5
4
D6
3
D7
2
D8

MB40778P (FUJITSU)
8-BIT VIDEO D/A CONVERTER
— TOP VIEW —

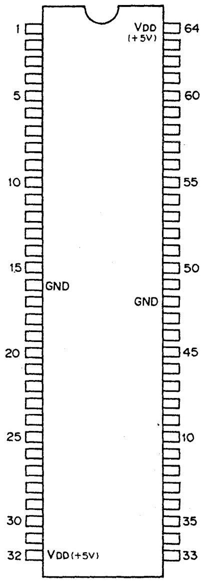

1 GND
2 D-Vcc (+5V)
COMP 3
VREF (+4V) 4
5 A-Vcc (+5V)
A OUT 6
7 A-Vcc (+5V)
8 D-Vcc (+5V)
9 GND
18 D8 IN
17 D7 IN
16 D6 IN
15 D5 IN
14 D4 IN
13 D3 IN
12 D2 IN
11 D1 IN
10 CK IN


11 D1
12 D2
13 D3
14 D4
15 D5
16 D6
17 D7
18 D8
4 VREF
10
A OUT 6
A-Vcc 5
A-Vcc 7
D-Vcc 2
D-Vcc 8
GND 1
GND 9
COMP
3

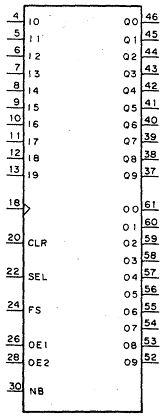
A OUT ; ANALOG OUTPUT
CK ; CLOCK INPUT
COMP ; COMPENSATION
D1–D8 ; DIGITAL INPUTS
VREF ; REFERENCE VOLTAGE INPUT


CK 10
MSB
D1 11
D2 12
D3 13
D4 14
D5 15
D6 16
D7 17
D8 18
LSB
VREF 4
8
MASTER SLAVE REGISTER
8
BUFFER
8
CURRENT SWITCH
8
REGISTER NETWORK
6
A OUT
3
COMP

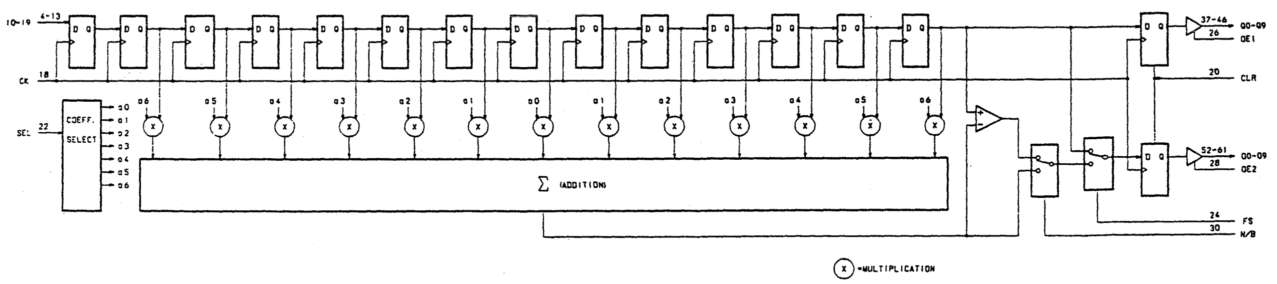
MB650205 (FUJITSU)
C-MOS FIR BANDPASS/NOTCH FILTER GATE ARRAY
– TOP VIEW –


1
5
10
15
20
25
30
32
VDD (+5V)
64
60
55
50
45
10
35
33
GND
GND
VDD (+5V)

PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	—		33	—	
2	—		34	—	
3	—		35	—	
4	I	I0	36	—	
5	I	I1	37	O	Q9
6	I	I2	38	O	Q8
7	I	I3	39	O	Q7
8	I	I4	40	O	Q6
9	I	I5	41	O	Q5
10	I	I6	42	O	Q4
11	I	I7	43	O	Q3
12	I	I8	44	O	Q2
13	I	I9	45	O	Q1
14	—		46	O	Q0
15	—		47	—	
16	—	GND	48	—	GND
17	—		49	—	
18	I	CK	50	—	
19	—		51	—	
20	I	CLR	52	O	O9
21	—		53	O	O8
22	I	SEL	54	O	O7
23	—		55	O	O6
24	I	FS	56	O	O5
25	—		57	O	O4
26	I	OE1	58	O	O3
27	—		59	O	O2
28	I	OE2	60	O	O1
29	—		61	O	O0
30	—	NB	62	—	
31	—		63	—	
32	—	V_{DD}(+5V)	64	—	V_{DD}(+5V)

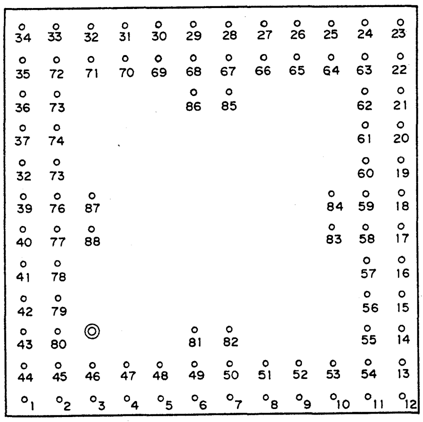

4 I0
5 I1
6 I2
7 I3
8 I4
9 I5
10 I6
11 I7
12 I8
13 I9
18
20 CLR
22 SEL
24 FS
26 OE1
28 OE2
30 NB
Q0 46
Q1 45
Q2 44
Q3 43
Q4 42
Q5 41
Q6 40
Q7 39
Q8 38
Q9 37
O0 61
O1 60
O2 59
O3 58
O4 57
O5 56
O6 55
O7 54
O8 53
O9 52

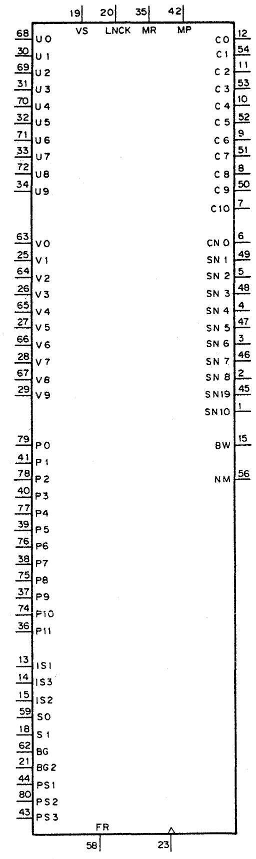
CK : 13.5MHz CLOCK INPUT
CLR : OUTPUT CLEAR
FS : FILTER SELECT
I0 – I9 : INPUT DATA
NB : NOTCH OR BANDPASS FILTER FUNCTION
O0 – O9 : FILTERED OUTPUT DATA
OE1,OE2 : OUTPUT ENABLE
Q0 – Q9 : UNFILTERED (DELAYED) OUTPUT DATA
SEL : FILTER MODE ASYNCHRONOUS SELECT


I0~I9
4-13
CK
18
SEL
22
COEFF. SELECT
a0
a1
a2
a3
a4
a5
a6
D Q
a6
a5
a4
a3
a2
a1
a0
a1
a2
a3
a4
a5
a6
X
Σ (ADDITION)
37-46
Q0-Q9
26
OE1
20
CLR
52-61
O0-O9
28
OE2
24
FS
30
N/B
X = MULTIPLICATION

MB652208 (FUJITSU)

C-MOS SUBCARRIER GENERATION GATE ARRAY
- TOP VIEW -


34 33 32 31 30 29 28 27 26 25 24 23
35 72 71 70 69 68 67 66 65 64 63 22
36 73 86 85 62 21
37 74 61 20
32 73 60 19
39 76 87 84 59 18
40 77 88 83 58 17
41 78 57 16
42 79 56 15
43 80 81 82 55 14
44 45 46 47 48 49 50 51 52 53 54 13
1 2 3 4 5 6 7 8 9 10 11 12

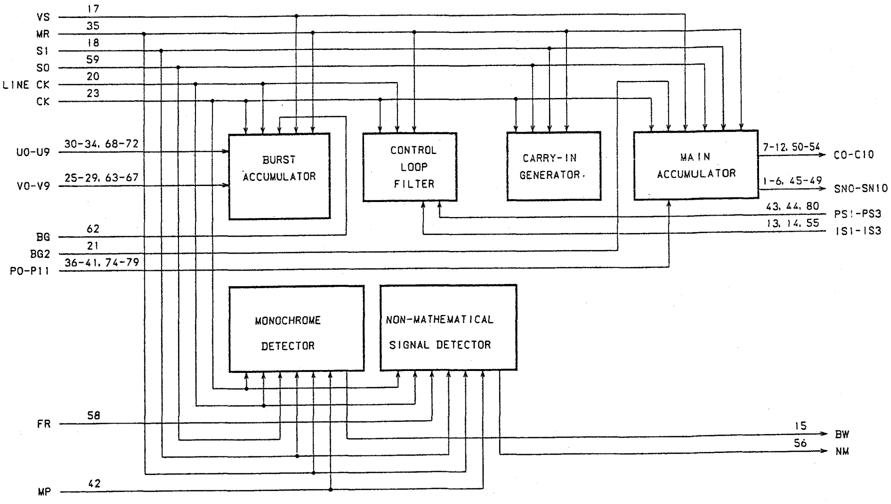

19 VS
20 LNCK
35 MR
42 MP
68 U0
30 U1
69 U2
31 U3
70 U4
32 U5
71 U6
33 U7
72 U8
34 U9
63 V0
25 V1
64 V2
26 V3
65 V4
27 V5
66 V6
28 V7
67 V8
29 V9
79 P0
41 P1
78 P2
40 P3
77 P4
39 P5
76 P6
38 P7
75 P8
37 P9
74 P10
36 P11
13 IS1
14 IS3
15 IS2
59 S0
18 S1
62 BG
21 BG2
44 PS1
80 PS2
43 PS3
C0 12
C1 54
C2 11
C3 53
C4 10
C5 52
C6 9
C7 51
C8 8
C9 50
C10 7
CN0 6
SN1 49
SN2 5
SN3 48
SN4 4
SN5 47
SN6 3
SN7 46
SN8 2
SN19 45
SN10 1
BW 15
NM 56
FR 58
23

BG : BURST GATE
BG2 : BURST GATE 2
BW : MONOCHROME SIGNAL DETECTED
C0 – C10 : 11 BIT SIGN AND MAGNITUDE COSINE
CK : 13.5MHz CLOCK INPUT
FR : FRAME CLOCK
IS1 – IS3 : INTEGRAL DIVIDE
LNCK : LINE CLOCK
MP : MASTER PRESET SIGNAL
MR : MASTER RESET SIGNAL
NM : NON MATHEMATICAL SIGNAL DETECTED
P0 – P11 : 12 BIT NTSC PHASE WORD
PS1 – PS3 : PROPORTIONAL DIVIDE
S0.S1 : SUBCARRIER STANDARD SELECT SIGNAL
SN0 – SN10 : 11 BIT SIGN AND MAGNITUDE SINE
U0 – U9 : DEMODULATED U COLOR DIFFERENCE SIGNAL
V0 – V9 : DEMODULATED V COLOR DIFFERENCE SIGNAL
VS : V SWITCH GENERATED EXTERNALLY

PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	O	SN10	31	I	U3	61	—	N.C
2	O	SN8	32	I	U5	62	I	BG
3	O	SN6	33	I	U7	63	I	V0
4	O	SN4	34	I	U9	64	I	V2
5	O	SN2	35	I	MR	65	I	V4
6	O	SN0	36	I	P11	66	I	V6
7	O	C10	37	I	P9	67	I	V8
8	O	C8	38	I	P7	68	I	U0
9	O	C6	39	I	P5	69	I	U2
10	O	C4	40	I	P3	70	I	U4
11	O	C2	41	I	P1	71	I	U6
12	O	C0	42	I	MP	72	I	U8
13	I	IS1	43	I	PS3	73	—	N.C
14	I	IS3	44	I	PS1	74	I	P10
15	O	BW	45	O	SN9	75	I	P8
16	—	N.C	46	O	SN7	76	I	P6
17	I	VS	47	O	SN5	77	I	P4
18	I	S1	48	O	SN3	78	I	P2
19	—	N.C	49	O	SN1	79	I	P0
20	I	LNCK	50	O	C9	80	I	PS2
21	I	BG2	51	O	C7	81	—	GND
22	—	N.C	52	O	C5	82	—	V_{DD}(+5V)
23	I	CK	53	O	C3	83	—	V_{DD}(+5V)
24	—	N.C	54	O	C1	84	—	GND
25	I	V1	55	I	IS2	85	—	GND
26	I	V3	56	O	NM	86	—	V_{DD}(+5V)
27	I	V5	57	—	N.C	87	—	V_{DD}(+5V)
28	I	V7	58	I	FR	88	—	GND
29	I	V9	59	I	S0			
30	I	U1	60	—	N.C			

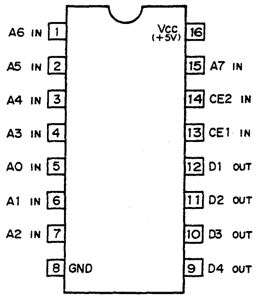
SELECTABLE SUBCARRIER FREQUENCY

S0	S1	STANDARD	FREQUENCY (MHz)
0	0	PAL-I	4.43361875
0	1	PAL-M	3.57561149
1	0	PAL-N	3.58205625
1	1	NTSC	3.57954545

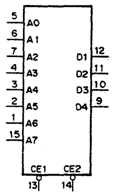

VS 17
MR 35
S1 18
S0 59
LINE CK 20
CK 23
U0-U9 30-34, 68-72
V0-V9 25-29, 63-67
BG 62
BG2 21
P0-P11 36-41, 74-79
BURST ACCUMULATOR
CONTROL LOOP FILTER
CARRY-IN GENERATOR
MAIN ACCUMULATOR
7-12, 50-54 C0-C10
1-6, 45-49 SN0-SN10
43, 44, 80 PS1-PS3
13, 14, 55 IS1-IS3
MONOCHROME DETECTOR
NON-MATHEMATICAL SIGNAL DETECTOR
FR 58
MP 42
15 BW
56 NM

MB7114H (FUJITSU) (ACCESS TIME = 30nS)

1024-BIT (256x4) PROM
— TOP VIEW —

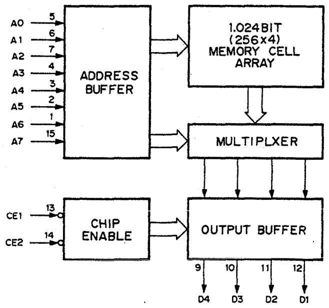


A6 IN 1
A5 IN 2
A4 IN 3
A3 IN 4
A0 IN 5
A1 IN 6
A2 IN 7
8 GND
Vcc (+5V) 16
15 A7 IN
14 CE2 IN
13 CE1 IN
12 D1 OUT
11 D2 OUT
10 D3 OUT
9 D4 OUT



A0 A1 A2 A3 A4 A5 A6 A7
D1 D2 D3 D4
CE1 CE2

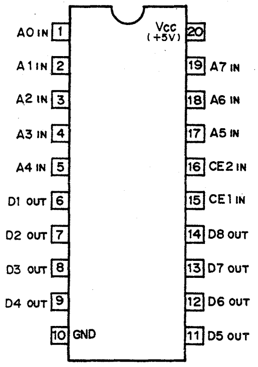
A0–A7 ; ADDRESS INPUTS
D1–D4 ; DATA OUTPUTS
CE1,CE2 ; CHIP ENABLE INPUTS



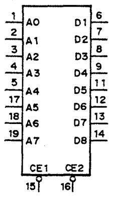
ADDRESS BUFFER
1.024BIT (256x4) MEMORY CELL ARRAY
MULTIPLXER
CHIP ENABLE
OUTPUT BUFFER
CE1
CE2
D4 D3 D2 D1

MB7118H (FUJITSU) (ACCESS TIME = 35nS)

2048-BIT (256x8) PROM WITH 3-STATE OUTPUTS
– TOP VIEW –

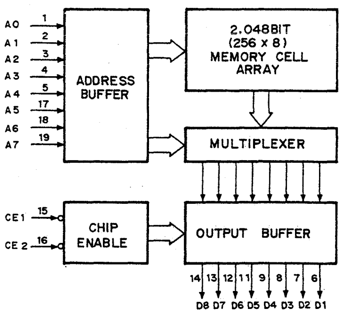


A0 IN 1
A1 IN 2
A2 IN 3
A3 IN 4
A4 IN 5
D1 OUT 6
D2 OUT 7
D3 OUT 8
D4 OUT 9
10 GND
Vcc (+5V) 20
19 A7 IN
18 A6 IN
17 A5 IN
16 CE2 IN
15 CE1 IN
14 D8 OUT
13 D7 OUT
12 D6 OUT
11 D5 OUT



A0 A1 A2 A3 A4 A5 A6 A7
D1 D2 D3 D4 D5 D6 D7 D8
CE1 CE2

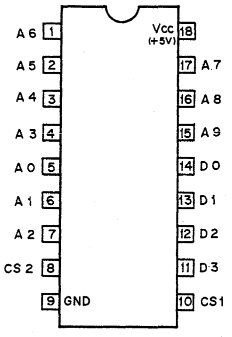
A0–A7 ; ADDRESS INPUTS
D1–D8 ; DATA OUTPUTS
CE1,CE2 ; CHIP ENABLE INPUTS



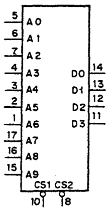
ADDRESS BUFFER
2.048BIT (256 x 8) MEMORY CELL ARRAY
MULTIPLEXER
CHIP ENABLE
OUTPUT BUFFER
CE1
CE 2
D8 D7 D6 D5 D4 D3 D2 D1

MB7122E (FUJITSU) (ACCESS TIME = 45nS)
MB7122H (FUJITSU) (ACCESS TIME = 35nS)

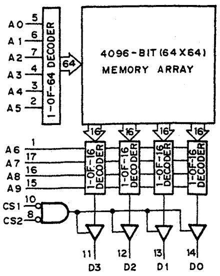
4096-BIT (1024x4) PROM WITH 3-STATE OUTPUTS
– TOP VIEW –



A6 1
A5 2
A4 3
A3 4
A0 5
A1 6
A2 7
CS2 8
9 GND
Vcc (+5V) 18
17 A7
16 A8
15 A9
14 D0
13 D1
12 D2
11 D3
10 CS1



A0 A1 A2 A3 A4 A5 A6 A7 A8 A9
D0 D1 D2 D3
CS1 CS2



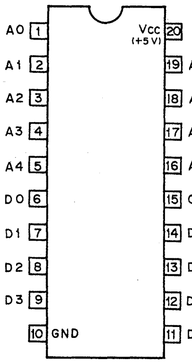
1-OF-64 DECODER
4096-BIT (64X64) MEMORY ARRAY
64
1-OF-16 DECODER
16
CS1
CS2
D3 D2 D1 D0

CHIP SEL CS2	CHIP SEL CS1	OUTPUT
0	0	ENABLE
X	1	HI-Z
1	X	HI-Z

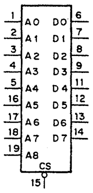
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
HI-Z ; HIGH IMPEDANCE

A0–A9 ; ADDRESS INPUTS
D0–D3 ; DATA OUTPUTS
CS1,CS2 ; CHIP SELECT INPUTS

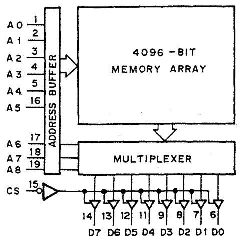
MB7124 (FUJITSU)
MB7124EZ (FUJITSU)
MB7124HZ (FUJITSU)
4096-BIT (512x8) PROM WITH 3-STATE OUTPUT
— TOP VIEW —



A0 1
A1 2
A2 3
A3 4
A4 5
D0 6
D1 7
D2 8
D3 9
10 GND
Vcc (+5V) 20
19 A8
18 A7
17 A6
16 A5
15 CS
14 D7
13 D6
12 D5
11 D4



A0 A1 A2 A3 A4 A5 A6 A7 A8
D0 D1 D2 D3 D4 D5 D6 D7
CS



ADDRESS BUFFER
4096-BIT MEMORY ARRAY
MULTIPLEXER
CS
D7 D6 D5 D4 D3 D2 D1 D0

CS	OUTPUT
0	ENABLE
1	HI-Z

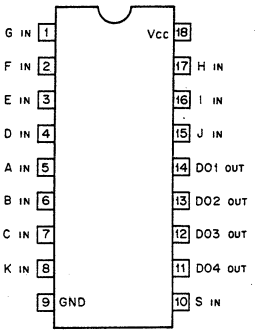
0 ; LOW LEVEL
1 ; HIGH LEVEL
HI-Z ; HIGH IMPEDANCE

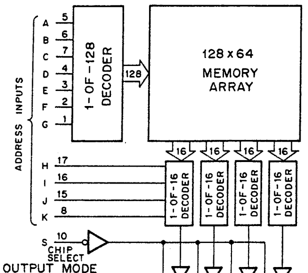
A0–A8 ; ADDRESS INPUTS
D0–D7 ; DATA OUTPUTS
CS ; CHIP SELECT INPUT

MB7128H (FUJITSU) (ACCESS TIME = 45nS)

8192-BIT (2048x4) PROM WITH 3-STATE OUTPUTS

– TOP VIEW –


G IN 1
F IN 2
E IN 3
D IN 4
A IN 5
B IN 6
C IN 7
K IN 8
9 GND
Vcc 18
17 H IN
16 I IN
15 J IN
14 DO1 OUT
13 DO2 OUT
12 DO3 OUT
11 DO4 OUT
10 S IN


ADDRESS INPUTS
A 5
B 6
C 7
D 4
E 3
F 2
G 1
1-OF-128 DECODER
128
128 x 64 MEMORY ARRAY
16
1-OF-16 DECODER
H 17
I 16
J 15
K 8
S 10
CHIP SELECT
11 DO4
12 DO3
13 DO2
14 DO1
DATA OUTPUTS

OUTPUT MODE

CHIP SEL S	OUTPUT
0	ENABLE
I	HI-IMPEDANCE

WORD/ADDRESS TABLE

WORD	ADDRESS INPUTS										
	K	J	I	H	G	F	E	D	C	B	A
0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	1	0
¦	¦	¦	¦	¦	¦	¦	¦	¦	¦	¦	¦
2045	1	1	1	1	1	1	1	1	1	0	1
2046	1	1	1	1	1	1	1	1	1	1	0
2047	1	1	1	1	1	1	1	1	1	1	1

DATA CODE		ACTUAL DATA			
		DO4	DO3	DO2	DO1
0	0	0	0	0	0
1	1	0	0	0	1
2	2	0	0	1	0
3	3	0	0	1	1
4	4	0	1	0	0
5	5	0	1	0	1
6	6	0	1	1	0
7	7	0	1	1	1
8	8	1	0	0	0
9	9	1	0	0	1
10	A	1	0	1	0
11	B	1	0	1	1
12	C	1	1	0	0
13	D	1	1	0	1
14	E	1	1	1	0
15	F	1	1	1	1

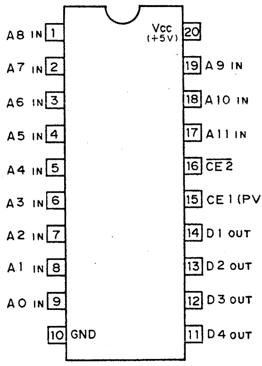
IN DECIMAL
IN HEXADECIMAL

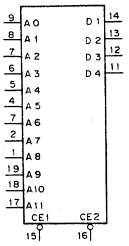
0 : LOW LEVEL
1 : HIGH LEVEL

MB7152H (FUJITSU)

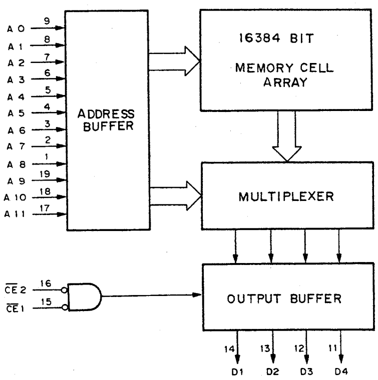
16384-BIT (4096x4) PROM WITH 3-STATE OUTPUTS

– TOP VIEW –


A8 IN 1
A7 IN 2
A6 IN 3
A5 IN 4
A4 IN 5
A3 IN 6
A2 IN 7
A1 IN 8
A0 IN 9
10 GND
Vcc (+5V) 20
19 A9 IN
18 A10 IN
17 A11 IN
16 CE2
15 CE1 (PVCE)
14 D1 OUT
13 D2 OUT
12 D3 OUT
11 D4 OUT


9 A0
8 A1
7 A2
6 A3
5 A4
4 A5
3 A6
2 A7
1 A8
19 A9
18 A10
17 A11
CE1 15
CE2 16
D1 14
D2 13
D3 12
D4 11

A0 – A11 : ADDRESS INPUTS
CE1,CE2 : CHIP ENABLE INPUTS
D1 – D4 : DATA OUTPUTS


A0 9
A1 8
A2 7
A3 6
A4 5
A5 4
A6 3
A7 2
A8 1
A9 19
A10 18
A11 17
ADDRESS BUFFER
16384 BIT MEMORY CELL ARRAY
MULTIPLEXER
CE2 16
CE1 15
OUTPUT BUFFER
14 D1
13 D2
12 D3
11 D4

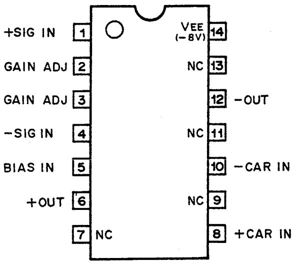
CHIP SEL		OUTPUT
CE1	CE2	
0	0	ENABLE
1	X	HI-Z
X	1	

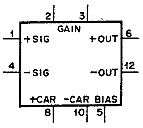
0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE
HI-Z : HIGH IMPEDANCE

MC1496P (MOTOROLA)

BALANCED MODULATOR/DEMODULATOR

– TOP VIEW –

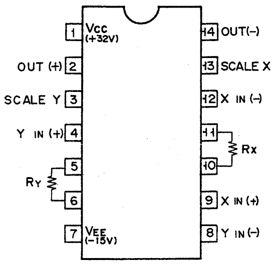

+SIG IN 1
GAIN ADJ 2
GAIN ADJ 3
–SIG IN 4
BIAS IN 5
+OUT 6
7 NC
VEE (–8V) 14
NC 13
12 –OUT
NC 11
10 –CAR IN
NC 9
8 +CAR IN

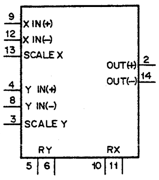

2
3
GAIN
1 +SIG
4 –SIG
+OUT 6
–OUT 12
+CAR –CAR BIAS
8 10 5

MC1595L (MOTOROLA)

LINEAR MULTIPLIER

— TOP VIEW —

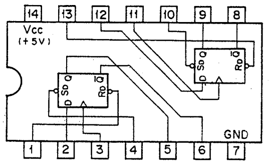

1 Vcc (+32V)
OUT (+) 2
SCALE Y 3
Y IN (+) 4
5
RY
6
7 VEE (–15V)
14 OUT(–)
13 SCALE X
12 X IN (–)
11
RX
10
9 X IN (+)
8 Y IN (–)


9 X IN(+)
12 X IN(–)
13 SCALE X
4 Y IN(+)
8 Y IN(–)
3 SCALE Y
OUT(+) 2
OUT(–) 14
RY
RX
5 6
10 11

MC74F74N (MOTOROLA)

TTL D-TYPE FLIP FLOP WITH DIRECT SET/RESET

— TOP VIEW —


14 13 12 11 10 9 8
Vcc (+5V)
GND
1 2 3 4 5 6 7

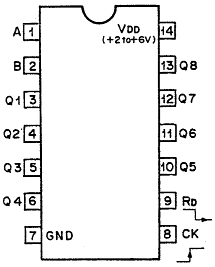
INPUTS				OUTPUTS	
$\overline{S_D}$	$\overline{R_D}$	CK	D	Qn+1	$\overline{Qn+1}$
0	1	X	X	1	0
1	0	X	X	0	1
0	0	X	X	1*	1*
1	1	↑	1	1	0
1	1	↑	0	0	1
1	1	0	X	Qn	$\overline{Q}$n

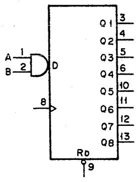
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
1*; NONSTABLE

MC74HC164N (MOTOROLA)
SN74HC164N (TI)
TC74HC164P (TOSHIBA)

C-MOS 8-BIT SERIAL-IN/PARALLEL-OUT SHIFT REGISTER

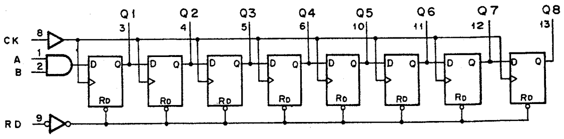
— TOP VIEW —


A 1
B 2
Q1 3
Q2 4
Q3 5
Q4 6
7 GND
VDD (+2to+6V) 14
13 Q8
12 Q7
11 Q6
10 Q5
9 RD
8 CK

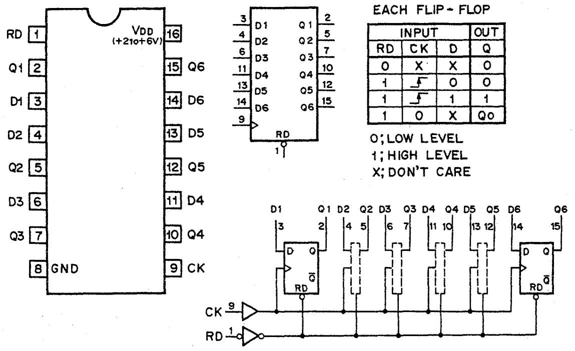

A 1
B 2
D
8
RD
9
Q1 3
Q2 4
Q3 5
Q4 6
Q5 10
Q6 11
Q7 12
Q8 13

INPUTS				OUTPUTS			
RD	CK	A	B	Q1	Q2	----	Q8
0	X	X	X	0	0	0	0
1	0	X	X	Q1o	Q2o	----	Q8o
1	↑	1	1	1	Q1n	----	Q7n
1	↑	0	X	0	Q1n	----	Q7n
1	↑	X	0	0	Q1n	----	Q7n

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE


Q1 3
Q2 4
Q3 5
Q4 6
Q5 10
Q6 11
Q7 12
Q8 13
CK 8
A 1
B 2
RD 9
D Q
RD

MC74HC174N (MOTOROLA)
SN74HC174N (TI)
C-MOS D-TYPE FLIP-FLOP WITH RESET
— TOP VIEW —

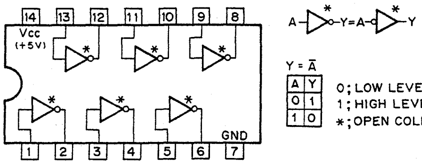

RD 1
Q1 2
D1 3
D2 4
Q2 5
D3 6
Q3 7
8 GND
VDD (+2to+6V) 16
15 Q6
14 D6
13 D5
12 Q5
11 D4
10 Q4
9 CK
D1 D2 D3 D4 D5 D6
Q1 Q2 Q3 Q4 Q5 Q6
RD
CK 9
RD 1

EACH FLIP-FLOP

INPUT			OUT
RD	CK	D	Q
0	X	X	0
1	↑	0	0
1	↑	1	1
1	0	X	Qo

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

SN7406N (TI)
SN74LS06N (TI)
TTL INVERTER BUFFER/DRIVER WITH OPEN-COLLECTOR
– TOP VIEW –

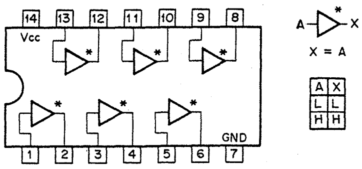

14 13 12 11 10 9 8
Vcc (+5V)
GND
1 2 3 4 5 6 7
A
Y=A
Y

$Y = \overline{A}$

A	Y
0	1
1	0

0; LOW LEVEL
1; HIGH LEVEL
*; OPEN COLLECTOR

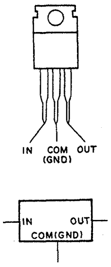
SN7417N (TI)
TTL BUFFER / DRIVER WITH OPEN-COLLECTOR
— TOP VIEW —


14 13 12 11 10 9 8
Vcc
GND
1 2 3 4 5 6 7
A
X

X = A

A	X
L	L
H	H

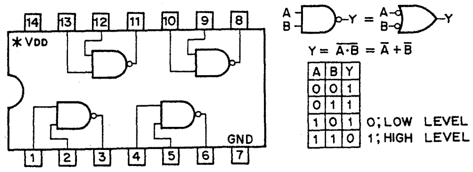
NJM78 ? ?A (JRC)
uPC78 ? ?H (NEC)
POSITIVE VOLTAGE REGULATOR (1A)
— SIDE VIEW —


IN
COM (GND)
OUT
IN
OUT
COM(GND)

OUTPUT VOLTAGE	AN78??	FS78??	HA178??P	L78??	NJM78??B	NJM78??A/K
+5V	AN7805	FS7805	HA17805P	L7805	---------	NJM7805A/K
+6V	AN7806	------	HA17806P	-----	---------	NJM7806A/K
+7V	AN7807	------	HA17807P	L7807	---------	----------
+8V	AN7808	------	HA17808P	-----	---------	NJM7808A/K
+8.5V	------	------	--------	-----	---------	----------
+9V	AN7809	------	--------	-----	---------	NJM7809A/K
+10V	AN7810	------	--------	-----	---------	----------
+12V	AN7812	FS7812	HA17812P	-----	NJM7812B	NJM7812A/K
+15V	AN7815	FS7815	HA17815P	-----	---------	NJM7815A/K
+18V	AN7818	------	HA17818P	-----	---------	NJM7818A/K
+20V	AN7820	------	--------	-----	---------	NJM7820A/K
+24V	AN7824	FS7824	HA17824P	-----	---------	NJM7824A/K

OUTPUT VOLTAGE	uA78??UC	uPC143??H	uPC78??H	TA78???P/AP
+5V	uA7805UC	uPC14305H	uPC7805H	TA78005P/AP
+6V	uA7806UC	---------	--------	TA78006P/AP
+7V	--------	---------	--------	---------
+8V	uA7808UC	uPC14308H	uPC7808H	TA78008P/AP
+8.5V	uA7885UC	---------	--------	---------
+9V	--------	---------	--------	TA78009P/AP
+10V	--------	---------	--------	TA78010P/AP
+12V	uA7812UC	uPC14312H	uPC7812H	TA78012P/AP
+15V	uA7815UC	uPC14315H	uPC7815H	TA78015P/AP
+18V	uA7818UC	uPC14318H	uPC7818H	TA78018P/AP
+20V	--------	---------	--------	TA78020P/AP
+24V	uA7824UC	uPC14324H	uPC7824H	TA78024P/AP

SN74HC00N (TI)
TC74HC00P (TOSHIBA)
C-MOS 2-INPUT NAND GATE
– TOP VIEW –


14 13 12 11 10 9 8
*VDD
GND
1 2 3 4 5 6 7
A
B
Y
A
B
Y

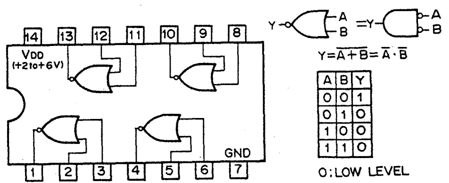
$Y = \overline{A \cdot B} = \overline{A} + \overline{B}$

A	B	Y
0	0	1
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

*VDD AC,HC; +2 to +6V
HCT; +5V

SN74HC02N (TI)
TC74HC02P (TOSHIBA)
C-MOS 2-INPUT POSITIVE-NOR GATE
– TOP VIEW –

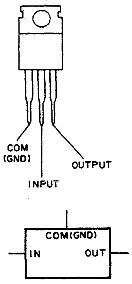

14 13 12 11 10 9 8
VDD (+2to+6V)
GND
1 2 3 4 5 6 7
Y
A
B
Y
A
B

$Y = \overline{A + B} = \overline{A} \cdot \overline{B}$

A	B	Y
0	0	1
0	1	0
1	0	0
1	1	0

0: LOW LEVEL
1: HIGH LEVEL

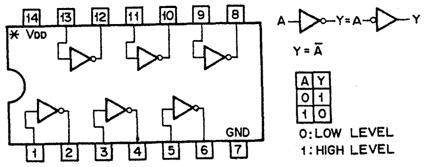
NJM79 ? ?A (JRC)
uPC79 ? ?H (NEC)
NEGATIVE VOLTAGE REGULATOR (1 A)
— SIDE VIEW —


COM (GND)
OUTPUT
INPUT
COM(GND)
IN
OUT

OUTPUT VOLTAGE	AN79??	FS79??	uA79??UC	uPC79??H	MC79??CT
-2V	------	------	--------	--------	MC7902CT
-5V	AN7905	FS7905	uA7905UC	uPC7905H	MC7905CT
-5.2V	------	------	--------	--------	MC7905.2CT
-6V	AN7906	------	uA7906UC	--------	MC7906CT
-7V	AN7907	------	--------	--------	--------
-8V	AN7908	------	uA7908UC	uPC7908H	MC7908CT
-9V	AN7909	------	--------	--------	--------
-10V	AN7910	------	--------	--------	--------
-12V	AN7912	------	uA7912UC	uPC7912H	MC7912CT
-15V	AN7915	------	uA7915UC	uPC7915H	MC7915CT
-18V	AN7918	------	uA7918UC	uPC7918H	MC7918CT
-20V	AN7920	------	--------	--------	--------
-24V	AN7924	------	uA7924UC	uPC7924H	MC7924CT

OUTPUT VOLTAGE	NJM79??A
-2V	--------
-5V	NJM7905A
-5.2V	--------
-6V	NJM7906A
-7V	--------
-8V	NJM7908A
-9V	NJM7909A
-10V	--------
-12V	NJM7912A
-15V	NJM7915A
-18V	NJM7918A
-20V	--------
-24V	NJM7924A

SN74HC04N (TI)
TC74HC04P (TOSHIBA)
C-MOS INVERTER
– TOP VIEW –


14 13 12 11 10 9 8
* VDD
GND
1 2 3 4 5 6 7
A
Y=A
Y

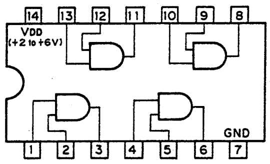
$Y = \overline{A}$

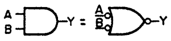
A	Y
0	1
1	0

0: LOW LEVEL
1: HIGH LEVEL

* VDD HC,HCU; +2to+6V
HCT; +5V

SN74HC08N (TI)
TC74HC08P (TOSHIBA)
C-MOS 2-INPUT AND GATE
— TOP VIEW —


14
13
12
11
10
9
8
VDD (+2 to +6V)
GND
1
2
3
4
5
6
7

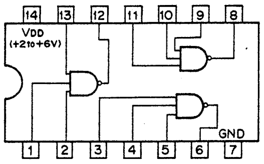


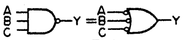
$Y = A \cdot B = \overline{\overline{A} + \overline{B}}$

A	B	Y
0	0	0
0	1	0
1	0	0
1	1	1

0; LOW LEVEL
1; HIGH LEVEL

SN74HC10N (TI)
TC74HC10P (TOSHIBA)
C-MOS 3-INPUT NAND GATE
— TOP VIEW —


14
13
12
11
10
9
8
VDD (+2to+6V)
GND
1
2
3
4
5
6
7

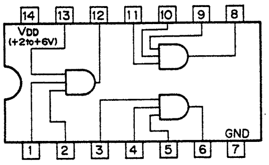


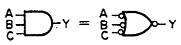
$Y = \overline{ABC} = \overline{A} + \overline{B} + \overline{C}$

A	B	C	Y
0	0	0	1
0	0	1	1
0	1	0	1
0	1	1	1
1	0	0	1
1	0	1	1
1	1	0	1
1	1	1	0

0 : LOW LEVEL
1 : HIGH LEVEL

SN74HC11N (TI)
TC74HC11P (TOSHIBA)
C-MOS 3-INPUT POSITIVE-AND GATE


14
13
12
11
10
9
8
VDD (+2to+6V)
GND
1
2
3
4
5
6
7

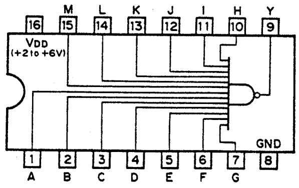


$Y = A \cdot B \cdot C = \overline{\overline{A} + \overline{B} + \overline{C}}$

A	B	C	Y
0	0	0	0
0	0	1	0
0	1	0	0
0	1	1	0
1	0	0	0
1	0	1	0
1	1	0	0
1	1	1	1

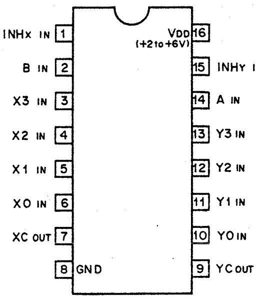
0;LOW LEVEL
1;HIGH LEVEL

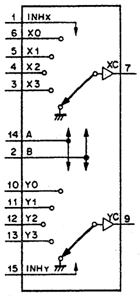
SN74HC133N (TI)
C-MOS 13-INPUT NAND GATE
— TOP VIEW —


M
L
K
J
I
H
Y
16
15
14
13
12
11
10
9
VDD (+2to+6V)
GND
1
2
3
4
5
6
7
8
A
B
C
D
E
F
G

$Y = \overline{A \cdot B \cdot C \cdot D \cdot E \cdot F \cdot G \cdot H \cdot I \cdot J \cdot K \cdot L \cdot M}$

SN74HC153N (TI)
TC74HC153P (TOSHIBA)
C-MOS 4-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
— TOP VIEW —

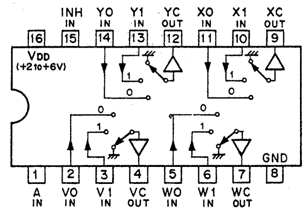

INHx IN 1
B IN 2
X3 IN 3
X2 IN 4
X1 IN 5
X0 IN 6
XC OUT 7
8 GND
VDD 16
(+2to+6V)
15 INHY IN
14 A IN
13 Y3 IN
12 Y2 IN
11 Y1 IN
10 Y0 IN
9 YC OUT

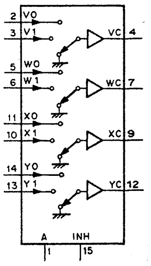

1 INHx
6 X0
5 X1
4 X2
3 X3
XC 7
14 A
2 B
10 Y0
11 Y1
12 Y2
13 Y3
YC 9
15 INHY

CONTROL IN			ON CHANNEL
INH	B	A	
0	0	0	0
0	0	1	1
0	1	0	2
0	1	1	3
1	X	X	GND

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

SN74HC157N (TI)
TC74HC157P (TOSHIBA)
C-MOS 2-LINE-TO-1-LINE DATA SELECTOR/MULTIPLEXER
– TOP VIEW –


INH IN
Y0 IN
Y1 IN
YC OUT
X0 IN
X1 IN
XC OUT
16
15
14
13
12
11
10
9
VDD (+2to+6V)
GND
1
2
3
4
5
6
7
8
A IN
V0 IN
V1 IN
VC OUT
W0 IN
W1 IN
WC OUT

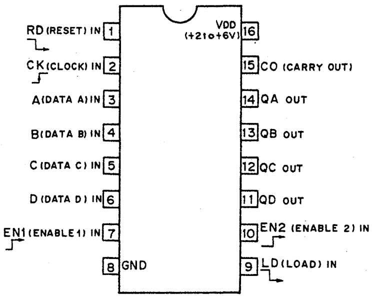

2 V0
3 V1
VC 4
5 W0
6 W1
WC 7
11 X0
10 X1
XC 9
14 Y0
13 Y1
YC 12
A
INH
1
15

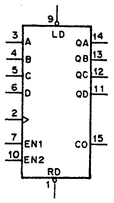
CONT. IN		ON CHANNEL
INH	A	
0	0	0
0	1	1
1	X	GND

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

SN74HC161N (TI) (V_{DD} = +2 to +6V)
TC74HC161P (TOSHIBA) (V_{DD} = +2 to +6V)

C-MOS SYNCHRONOUS PRESETTABLE 4-BIT BINARY COUNTER
– TOP VIEW –


RD (RESET) IN 1
CK (CLOCK) IN 2
A (DATA A) IN 3
B (DATA B) IN 4
C (DATA C) IN 5
D (DATA D) IN 6
EN1 (ENABLE 1) IN 7
8 GND
VDD (+2 to +6V) 16
15 CO (CARRY OUT)
14 QA OUT
13 QB OUT
12 QC OUT
11 QD OUT
10 EN2 (ENABLE 2) IN
9 LD (LOAD) IN


9
LD
3 A
4 B
5 C
6 D
2
7 EN1
10 EN2
RD
1
QA 14
QB 13
QC 12
QD 11
CO 15

MODE SELECTION

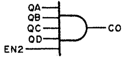
CONTROL INPUTS				MODE
RD	LD	EN1	EN2	
0	X	X	X	RESET (ASYNCHRONOUS)
1	0	X	X	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	X	0	NO COUNT
1	1	1	1	COUNT

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

COUNT SEQUENCE

COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

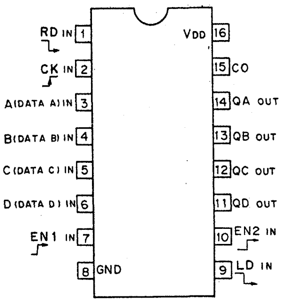
CARRY OUTPUT "CO"

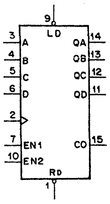

QA
QB
QC
QD
EN2
CO

CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

SN74HC163N (TI) (V_{DD} = +2 to +6V)
TC74HC163P (TOSHIBA) (V_{DD} = +2 to +6V)

C-MOS PRESETTABLE SYNCHRONOUS 4-BIT BINARY COUNTER
– TOP VIEW –


RD IN 1
CK IN 2
A (DATA A) IN 3
B (DATA B) IN 4
C (DATA C) IN 5
D (DATA D) IN 6
EN1 IN 7
8 GND
VDD 16
15 CO
14 QA OUT
13 QB OUT
12 QC OUT
11 QD OUT
10 EN2 IN
9 LD IN


9
LD
3 A
4 B
5 C
6 D
2
7 EN1
10 EN2
RD
1
QA 14
QB 13
QC 12
QD 11
CO 15

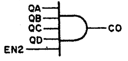
MODE SELECTION

CONTROL INPUTS				MODE
RD	LD	EN1	EN2	
0	X	X	X	RESET (SYNCHRONOUS)
1	0	X	X	PRESET (SYNCHRONOUS)
1	1	0	X	NO COUNT
1	1	X	0	NO COUNT
1	1	1	1	COUNT

COUNT SEQUENCE

COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

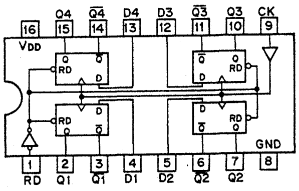
CARRY OUTPUT "CO"

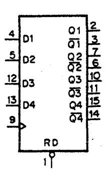

QA
QB
QC
QD
EN2
CO

CO IS HIGH WHEN EN2 INPUT IS HIGH AND COUNT IS "15".

SN74HC175N (TI) (V_{DD} = +2 to +6V)
TC74HC175P (TOSHIBA) (V_{DD} = +2 to +6V)

C-MOS D-TYPE FLIP-FLOP WITH RESET
– TOP VIEW –


Q4
$\overline{Q4}$
D4
D3
$\overline{Q3}$
Q3
CK
16
15
14
13
12
11
10
9
VDD
Q
$\overline{Q}$
RD
D
GND
1
2
3
4
5
6
7
8
RD
Q1
$\overline{Q1}$
D1
D2
$\overline{Q2}$
Q2

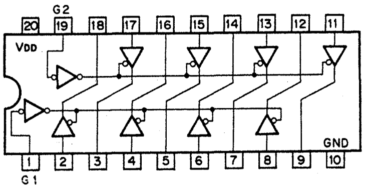

4 D1
5 D2
12 D3
13 D4
9
RD
1
Q1 2
$\overline{Q1}$ 3
Q2 7
$\overline{Q2}$ 6
Q3 10
$\overline{Q3}$ 11
Q4 15
$\overline{Q4}$ 14

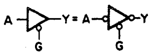
RD	CK	D	Q	$\overline{Q}$
0	X	X	0	1
1	↑	1	1	0
1	↑	0	0	1
1	0	X	Qo	$\overline{Q}$o

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE
Qo ; NO CHANGE
$\overline{Q}$o ; NO CHANGE

SN74HC244N (TI) (V_{DD} = +2 to +6V)
TC74HC244P (TOSHIBA) (V_{DD} = +2 to +6V)

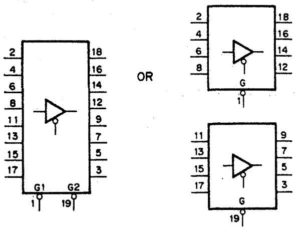
C-MOS BUS BUFFER WITH 3-STATE OUTPUTS
– TOP VIEW –


G2
20
19
18
17
16
15
14
13
12
11
VDD
GND
1
2
3
4
5
6
7
8
9
10
G1

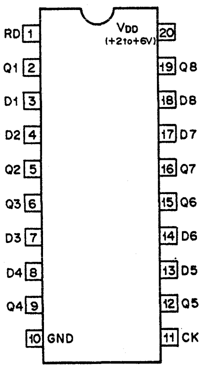


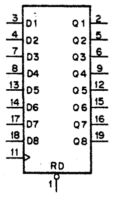
G	A	Y
0	0	0
0	1	1
1	X	HI-Z

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
HI-Z; HIGH IMPEDANCE


2
4
6
8
11
13
15
17
18
16
14
12
9
7
5
3
G1
G2
1
19
OR
2
4
6
8
18
16
14
12
G
1
11
13
15
17
9
7
5
3
G
19

SN74HC273N (TI)
TC74HC273P (TOSHIBA)
C-MOS D-TYPE FLIP-FLOP WITH RESET
— TOP VIEW —

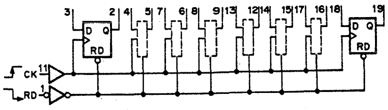

RD 1
Q1 2
D1 3
D2 4
Q2 5
Q3 6
D3 7
D4 8
Q4 9
10 GND
VDD (+2 to +6V) 20
19 Q8
18 D8
17 D7
16 Q7
15 Q6
14 D6
13 D5
12 Q5
11 CK


3 D1
4 D2
7 D3
8 D4
13 D5
14 D6
17 D7
18 D8
11
RD
1
Q1 2
Q2 5
Q3 6
Q4 9
Q5 12
Q6 15
Q7 16
Q8 19

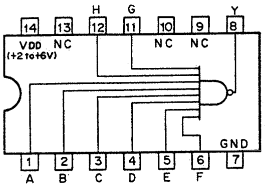
EACH FLIP-FLOP

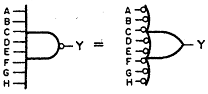
INPUT			OUT
RD	CK	D	Q
0	X	X	0
1	↑	0	0
1	↑	1	1
1	0	X	Qo

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE


3
2
4
5
7
6
8
9
13
12
14
15
17
16
18
19
D Q
RD
CK 11
RD 1

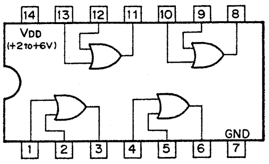
SN74HC30N (TI)
TC74HC30P (TOSHIBA)
C-MOS 8-INPUT POSITIVE-NAND GATE
— TOP VIEW —

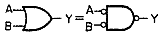

14
13
12
11
10
9
8
H
G
Y
VDD
NC
(+2 to+6V)
NC
NC
GND
1
2
3
4
5
6
7
A
B
C
D
E
F


A
B
C
D
E
F
G
H
Y
=
Y

$$Y=\overline{A\cdot B\cdot C\cdot D\cdot E\cdot F\cdot G\cdot H}$$
$$=\overline{A}+\overline{B}+\overline{C}+\text{-----}+\overline{H}$$

SN74HC32N (TI)
TC74HC32P (TOSHIBA)
C-MOS 2-INPUT OR GATE
— TOP VIEW —


14
13
12
11
10
9
8
VDD
(+2 to+6V)
GND
1
2
3
4
5
6
7

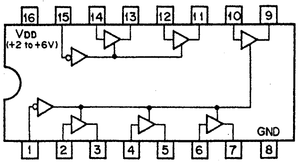


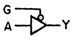
$$Y=A+B=\overline{\overline{A}\cdot\overline{B}}$$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	1

0;LOW LEVEL
1;HIGH LEVEL

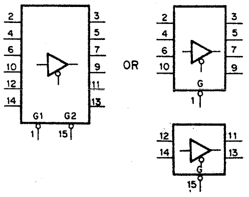
SN74HC367N (TI)
TC74HC367P (TOSHIBA)
C-MOS BUS DRIVER WITH 3-STATE OUTPUTS
— TOP VIEW —


16
15
14
13
12
11
10
9
VDD
(+2 to+6V)
GND
1
2
3
4
5
6
7
8



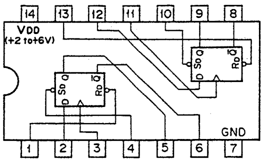
G	A	Y
0	0	0
0	1	1
1	X	HI-Z

0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE
HI-Z;HIGH IMPEDANCE


2
4
6
10
12
14
3
5
7
9
11
13
G1
G2
1
15
OR
2
4
6
10
3
5
7
9
G
1
12
14
11
13
15

SN74HC74N (TI)

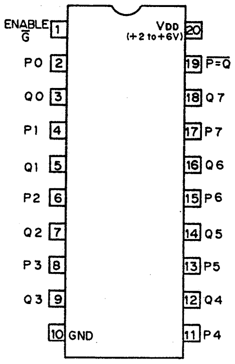
C-MOS D-TYPE FLIP FLOP WITH DIRECT SET/RESET
— TOP VIEW —

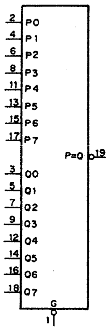

14
13
12
11
10
9
8
VDD
(+2 to+6V)
So
Ro
GND
1
2
3
4
5
6
7

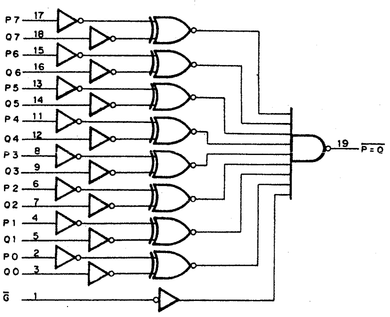
INPUTS				OUTPUTS	
$\overline{S_D}$	$\overline{R_D}$	CK	D	Qn+1	$\overline{Qn+1}$
0	1	X	X	1	0
1	0	X	X	0	1
0	0	X	X	1*	1*
1	1	↑	1	1	0
1	1	↑	0	0	1
1	1	0	X	Qn	$\overline{Q}$n

0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE
1*;NONSTABLE

SN74HC688N (TI)
TC74HC688P (TOSHIBA)
C-MOS 8-BIT MAGNITUDE COMPARATOR
— TOP VIEW —


ENABLE
G
1
VDD
(+2 to+6V)
20
P0 2
19 P=Q
Q0 3
18 Q7
P1 4
17 P7
Q1 5
16 Q6
P2 6
15 P6
Q2 7
14 Q5
P3 8
13 P5
Q3 9
12 Q4
10 GND
11 P4

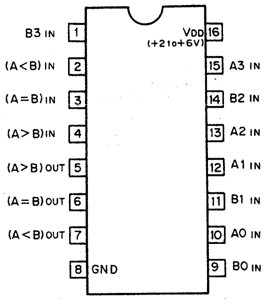

2 P0
4 P1
6 P2
8 P3
11 P4
13 P5
15 P6
17 P7
P=Q
19
3 Q0
5 Q1
7 Q2
9 Q3
12 Q4
14 Q5
16 Q6
18 Q7
G
1

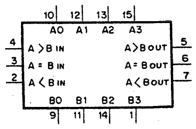

P7 17
Q7 18
P6 15
Q6 16
P5 13
Q5 14
P4 11
Q4 12
P3 8
Q3 9
P2 6
Q2 7
P1 4
Q1 5
P0 2
Q0 3
G 1
19
P=Q

INPUTS		OUTPUT
P ,Q	$\overline{G}$	$\overline{P=Q}$
P=Q	0	0
P>Q	0	1
P<Q	0	1
X	1	1

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

SN74HC85N (TI)
TC74HC85P (TOSHIBA)
C-MOS 4-BIT MAGNITUDE COMPARATOR
— TOP VIEW —

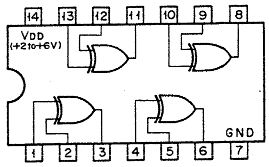

B3 IN 1
VDD
(+2 to+6V)
16
(A<B)IN 2
15 A3 IN
(A=B)IN 3
14 B2 IN
(A>B)IN 4
13 A2 IN
(A>B)OUT 5
12 A1 IN
(A=B)OUT 6
11 B1 IN
(A<B)OUT 7
10 A0 IN
8 GND
9 B0 IN

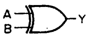

10
12
13
15
A0
A1
A2
A3
4 A>B IN
3 A=B IN
2 A<B IN
A>B OUT 5
A=B OUT 6
A<B OUT 7
B0
B1
B2
B3
9
11
14
1

INPUTS								OUTPUTS		
DATA COMPARING					CASCADING					
	A3 , B3	A2 , B2	A1 , B1	A0 , B0	A<B	A=B	A>B	A<B	A=B	A>B
A>B	A3>B3	X	X	X	X	X	X	0	0	1
	A3=B3	A2>B2	X	X						
	A3=B3	A2=B2	A1>B1	X						
	A3=B3	A2=B2	A1=B1	A0>B0						
A=B	A3=B3	A2=B2	A1=B1	A0=B0	0	0	0	1	0	1
					0	0	1	0	0	1
					X	1	X	0	1	0
					1	0	0	1	0	0
					1	0	1	0	0	0
A<B	A3=B3	A2=B2	A1=B1	A0<B0	X	X	X	1	0	0
	A3=B3	A2=B2	A1<B1	X						
	A3=B3	A2<B2	X	X						
	A3<B3	X	X	X						

0;LOW LEVEL　1;HIGH LEVEL　X;DON'T CARE

SN74HC86N (TI)
TC74HC86P (TOSHIBA)
C-MOS EXCLUSIVE OR GATE
— TOP VIEW —


VDD
(+2to+6V)
GND
14
13
12
11
10
9
8
1
2
3
4
5
6
7

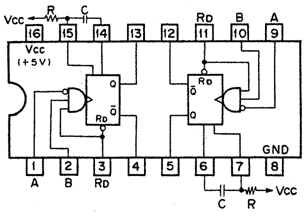


$Y = \bar{A} \cdot B + A \cdot \bar{B}$

A	B	Y
0	0	0
0	1	1
1	0	1
1	1	0

0; LOW LEVEL
1; HIGH LEVEL

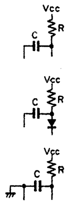
SN74LS123N (TI)
TTL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR WITH DIRECT RESET
— TOP VIEW —


Vcc
R
C
RD
B
A
16
15
14
13
12
11
10
9
Vcc
(+5V)
Q
RD
Q̄
GND
1
2
3
4
5
6
7
8
A
B
RD
C
R
Vcc

INPUTS			OUTPUTS	
RD	A	B	Q	Q̄
0	X	X	0	1
X	1	X	0	1
X	X	0	0	1
1	0	↑	⎍	⊔
1	↓	1	⎍	⊔
↑	0	1	⎍	⊔

0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

OUTPUT PULSE WIDTH


Vcc
C
R
Vcc
C
R
Vcc
C
R

'123 ; $T_W = 0.28 \left(1 + \frac{700}{R}\right) CR$

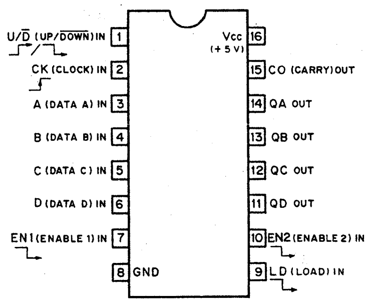
'L123; $T_W = 0.33 \left(1 + \frac{700}{R}\right) CR$

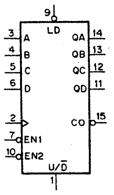
'123 ; $T_W = 0.25 \left(1 + \frac{700}{R}\right) CR$

'L123; $T_W = 0.29 \left(1 + \frac{700}{R}\right) CR$

'LS123; $T_W = 0.45CR$

SN74LS669N (TI)
TTL PRESETTABLE SYNCHRONOUS 4-BIT BINARY UP/DOWN COUNTER
— TOP VIEW —


U/D̄ (UP/DOWN̄) IN 1
CK (CLOCK) IN 2
A (DATA A) IN 3
B (DATA B) IN 4
C (DATA C) IN 5
D (DATA D) IN 6
EN1 (ENABLE 1) IN 7
8 GND
Vcc (+5V) 16
15 CO (CARRY) OUT
14 QA OUT
13 QB OUT
12 QC OUT
11 QD OUT
10 EN2 (ENABLE 2) IN
9 LD (LOAD) IN


9
LD
3 A
4 B
5 C
6 D
QA 14
QB 13
QC 12
QD 11
2
CO 15
7 EN1
10 EN2
U/D̄
1

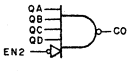
MODE SELECTION

INPUTS				MODE
LD	EN1	EN2	U/D̄	
0	X	X	X	PRESET
X	1	X	X	NO COUNT
X	X	1	X	NO COUNT
1	0	0	1	UP COUNT
1	0	0	0	DOWN COUNT

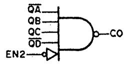
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE

CARRY OUTPUTS "CO"

AT U/D̄ = 1


QA
QB
QC
QD
EN2
CO

AT U/D̄ = 0

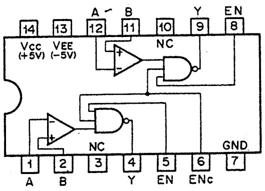

QA̅
QB
QC
QD̅
EN2
CO

COUNT SEQUENCE

COUNT	OUTPUTS			
	QD	QC	QB	QA
0	0	0	0	0
1	0	0	0	1
2	0	0	1	0
3	0	0	1	1
4	0	1	0	0
5	0	1	0	1
6	0	1	1	0
7	0	1	1	1
8	1	0	0	0
9	1	0	0	1
10	1	0	1	0
11	1	0	1	1
12	1	1	0	0
13	1	1	0	1
14	1	1	1	0
15	1	1	1	1

UP COUNT ↓
DOWN COUN ↑

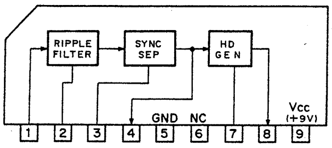
SN75207BN (TI)
BIPOLAR LINE RECEIVER (TTL COMPATIBLE)
— TOP VIEW —


A
B
Y
EN
14
13
12
11
10
9
8
Vcc
(+5V)
VEE
(−5V)
NC
NC
GND
1
2
3
4
5
6
7
A
B
Y
EN
ENc

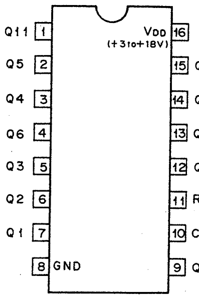
INPUTS			OUT
B − A	EN	ENc	Y
B − A ≧ 10mV	X	0	1
	0	X	1
	1	1	0
|B − A| < 10mV	X	0	1
	0	X	1
	1	1	*
B − A ≦ −10mV	X	X	1

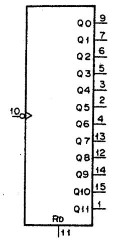
0; LOW LEVEL
1; HIGH LEVEL
X; DON'T CARE
*; INDETERMINATE

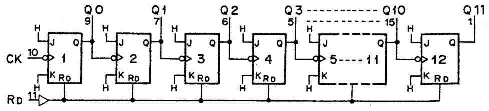
TA7357AP (TOSHIBA)
SYNC SEPARATOR/HD PULSE GENERATOR
— SIDE VIEW —


RIPPLE FILTER
SYNC SEP
HD GEN
GND
NC
Vcc
(+9V)
1
2
3
4
5
6
7
8
9

TC4040BP (TOSHIBA)
C-MOS 12-STAGE RIPPLE CARRY BINARY COUNTER/DRIVER
— TOP VIEW —


Q11 1
Q5 2
Q4 3
Q6 4
Q3 5
Q2 6
Q1 7
8 GND
VDD (+3to+18V) 16
15 Q10
14 Q9
13 Q7
12 Q8
11 RD
10 CK
9 Q0


10
Q0 9
Q1 7
Q2 6
Q3 5
Q4 3
Q5 2
Q6 4
Q7 13
Q8 12
Q9 14
Q10 15
Q11 1
RD
11

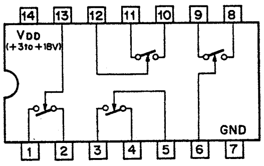

Q0
Q1
Q2
Q3
Q10
Q11
9
7
6
5
15
1
CK
10
RD
11
J
Q
K
RD
H
1
2
3
4
5----11
12

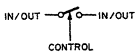
COUNT	Q11	Q10	Q9	Q8	Q7	Q6	Q5	Q4	Q3	Q2	Q1	Q0
0	0	0	0	0	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	0	1
2	0	0	0	0	0	0	0	0	0	0	1	0
3	0	0	0	0	0	0	0	0	0	0	1	1
⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮	⋮
4095	1	1	1	1	1	1	1	1	1	1	1	1

RD	Q11 -------- Q0
1	ALL LOW
0	COUNT

0; LOW LEVEL
1; HIGH LEVEL

TC4066BP (TOSHIBA)
TC4066BPHB (TOSHIBA)
C-MOS BILATERAL ANALOG SWITCH
— TOP VIEW —

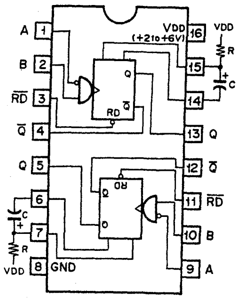

14
13
12
11
10
9
8
VDD
(+3to+18V)
GND
1
2
3
4
5
6
7


IN/OUT
IN/OUT
CONTROL

CONTROL	SWITCH
0	OFF
1	ON

0; LOW LEVEL
1; HIGH LEVEL

TC74HC123P (TOSHIBA)
C-MOS DUAL RETRIGGERABLE MONOSTABLE MULTIVIBRATOR
— TOP VIEW —

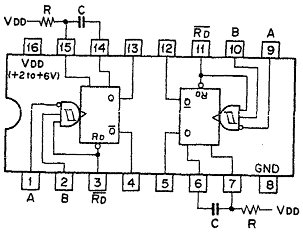

A 1
B 2
RD 3
Q 4
Q 5
6
7
C
R
VDD 8 GND
VDD (+2 to +6V) 16
VDD
R
C
15
14
13 Q
12 Q
11 RD
10 B
9 A
RD
RD

INPUT			OUTPUT	
$\overline{RD}$	A	B	Q	$\overline{Q}$
0	X	X	0	1
1	1	X	0	1
1	X	0	0	1
1	0	↑	⊓	⊔
1	↓	1	⊓	⊔
↑	0	1	⊓	⊔

0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

OUTPUT PULSE WIDTH = 0.46CR

TC74HC221P (TOSHIBA)
C-MOS MONOSTABLE MULTIVIBRATOR WITH SCHMITT TRIGGER INPUT
- TOP VIEW -

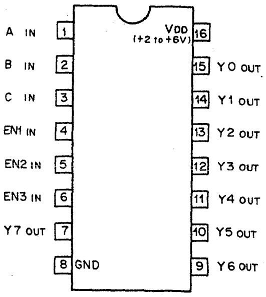

R C
VDD
RD B A
16 15 14 13 12 11 10 9
VDD (+2 to +6V)
Q
RD Q
GND
1 2 3 4 5 6 7 8
A B RD
C R
VDD

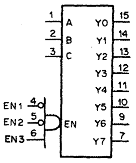
INPUTS			OUTPUTS	
$\overline{R_D}$	A	B	Q	$\overline{Q}$
0	X	X	0	1
X	1	X	0	1
X	X	0	0	1
1	0	↑	⊓	⊔
1	↓	1	⊓	⊔
↑	0	1	⊓	⊔

0;LOW LEVEL
1;HIGH LEVEL
X;DON'T CARE

OUTPUT PULSE WIDTH = 0.7CR

TC74HC238P (TOSHIBA)
C-MOS 3-TO-8 LINE DECODER/DEMULTIPLEXER
— TOP VIEW —


A IN 1
B IN 2
C IN 3
EN1 IN 4
EN2 IN 5
EN3 IN 6
Y7 OUT 7
8 GND
VDD (+2 to +6V) 16
15 Y0 OUT
14 Y1 OUT
13 Y2 OUT
12 Y3 OUT
11 Y4 OUT
10 Y5 OUT
9 Y6 OUT

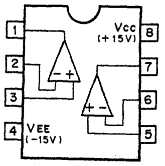

1 A
2 B
3 C
EN1 4
EN2 5
EN3 6
EN
Y0 15
Y1 14
Y2 13
Y3 12
Y4 11
Y5 10
Y6 9
Y7 7

INPUT				OUTPUT							
EN	C	B	A	Y7	Y6	Y5	Y4	Y3	Y2	Y1	Y0
0	X	X	X	0	0	0	0	0	0	0	0
1	0	0	0	0	0	0	0	0	0	0	1
1	0	0	1	0	0	0	0	0	0	1	0
1	0	1	0	0	0	0	0	0	1	0	0
1	0	1	1	0	0	0	0	1	0	0	0
1	1	0	0	0	0	0	1	0	0	0	0
1	1	0	1	0	0	1	0	0	0	0	0
1	1	1	0	0	1	0	0	0	0	0	0
1	1	1	1	1	0	0	0	0	0	0	0

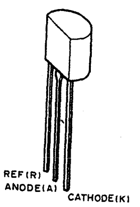
EN = $\overline{EN1} \cdot \overline{EN2} \cdot EN3$

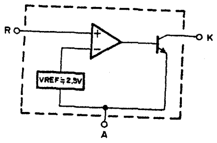
0 ; LOW LEVEL
1 ; HIGH LEVEL
X ; DON'T CARE

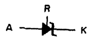
TL082CP (TI)
OPERATIONAL AMPLIFIER
(J FET-INPUT)
— TOP VIEW —


1
2
3
4 VEE (-15V)
Vcc (+15V) 8
7
6
5
- +
+ -

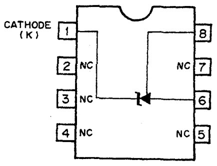
TL431CLPB (TXI)
ADJUSTABLE PRECISION SHUNT REGULATORS

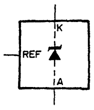

REF(R)
ANODE(A)
CATHODE(K)


R
K
+
VREF≒2.5V
A

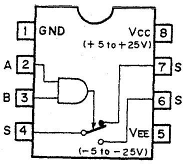


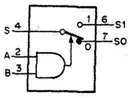
TL431CP (TI)
ADJUSTABLE PRECISION SHUNT REGULATOR
- TOP VIEW -


CATHODE (K) 1
2 NC
3 NC
4 NC
8 REF
NC 7
6 ANODE (A)
NC 5



TL601CP (TI)
P-MOS ANALOG SWITCH
— TOP VIEW —

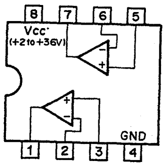

1 GND
A 2
B 3
S 4
Vcc (+5 to +25V) 8
7 SO
6 S1
VEE (-5 to -25V) 5


S 4
A 2
B 3
1
6 S1
7 SO
0

CONT IN		ON CHANNEL
A	B	
0	0	SO
0	1	SO
1	0	SO
1	1	S1

0; LOW LEVEL
1; HIGH LEVEL

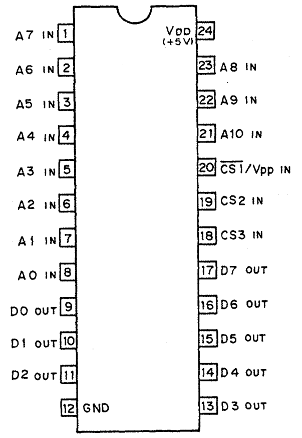
uPC393C (NEC)
VOLTAGE COMPARATOR
- TOP VIEW -

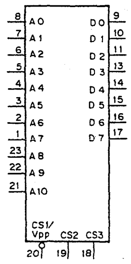

8 7 6 5
Vcc (+2 to +36V)
GND
1 2 3 4

WS57C291-45 (WSI) (ACCESS TIME = 45nS)

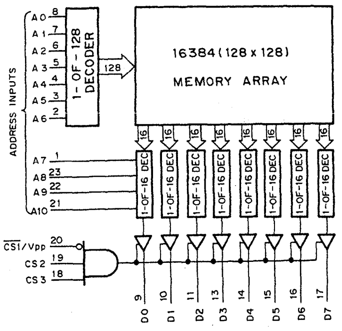
C-MOS 16K-BIT (2048x8) HIGH SPEED ERASABLE PROM

– TOP VIEW –


A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
D0 OUT 9
D1 OUT 10
D2 OUT 11
12 GND
24 VDD (+5V)
23 A8 IN
22 A9 IN
21 A10 IN
20 CS1/Vpp IN
19 CS2 IN
18 CS3 IN
17 D7 OUT
16 D6 OUT
15 D5 OUT
14 D4 OUT
13 D3 OUT


A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10
D0 D1 D2 D3 D4 D5 D6 D7
CS1/Vpp CS2 CS3
20 19 18

A0 – A12 : ADDRESS INPUTS
D0 – D7 : DATA OUTPUTS
CS1 – CS3 : CHIP SELECT INPUT
V_{PP} : PROGRAM POWER SUPPLY


ADDRESS INPUTS
A0 A1 A2 A3 A4 A5 A6
1-OF-128 DECODER
128
16384 (128 x 128)
MEMORY ARRAY
A7 A8 A9 A10
1-OF-16 DEC
16
CS1/Vpp 20
CS2 19
CS3 18
D0 D1 D2 D3 D4 D5 D6 D7

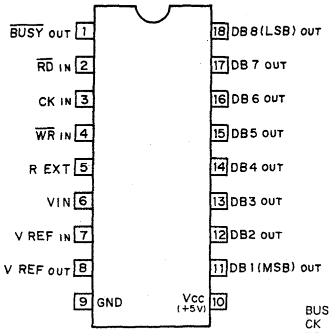
CHIP SEL			OUTPUT
$\overline{CS1}$/V_{PP}	CS2	CS3	
0	1	1	ENABLE
1	0	X	HI-IMPEDANCE
1	X	0	

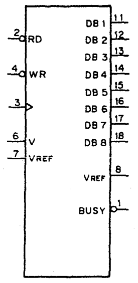
0 : LOW LEVEL
1 : HIGH LEVEL
X : DON'T CARE

ZN449J

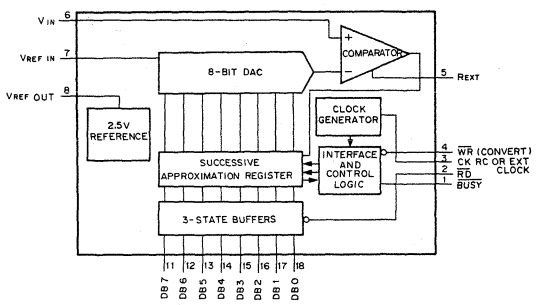
8-BIT UP-COMPATIBLE A/D CONVERTERS

– TOP VIEW –


BUSY OUT 1
RD IN 2
CK IN 3
WR IN 4
R EXT 5
VIN 6
V REF IN 7
V REF OUT 8
9 GND
18 DB8 (LSB) OUT
17 DB7 OUT
16 DB6 OUT
15 DB5 OUT
14 DB4 OUT
13 DB3 OUT
12 DB2 OUT
11 DB1 (MSB) OUT
Vcc (+5V) 10


RD WR V VREF
DB1 DB2 DB3 DB4 DB5 DB6 DB7 DB8
VREF
BUSY

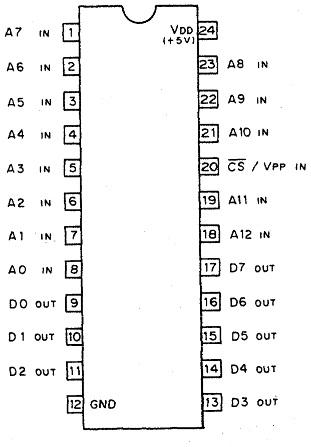
BUSY : BUSY
CK : CLOCK
DB1 – DB8 : DIGITAL OUTPUT
RD : READ
VIN : ANALOGUE INPUT
VREF : VOLTAGE REFERENCE
WR : WRITE

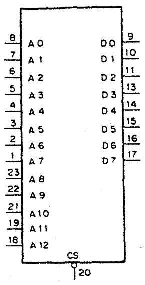

VIN
VREF IN
VREF OUT
COMPARATOR
8-BIT DAC
2.5V REFERENCE
CLOCK GENERATOR
SUCCESSIVE APPROXIMATION REGISTER
INTERFACE AND CONTROL LOGIC
3-STATE BUFFERS
REXT
WR (CONVERT)
CK RC OR EXT CLOCK
RD
BUSY
DB7 DB6 DB5 DB4 DB3 DB2 DB1 DB0

WS57C49B-35D (WSI) (ACCESS TIME = 35nS)

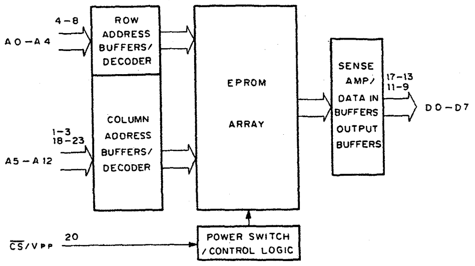
C-MOS 64K (8192x8) BIT HIGH SPEED ERASABLE PROM

– TOP VIEW –


A7 IN 1
A6 IN 2
A5 IN 3
A4 IN 4
A3 IN 5
A2 IN 6
A1 IN 7
A0 IN 8
D0 OUT 9
D1 OUT 10
D2 OUT 11
12 GND
24 VDD (+5V)
23 A8 IN
22 A9 IN
21 A10 IN
20 CS / VPP IN
19 A11 IN
18 A12 IN
17 D7 OUT
16 D6 OUT
15 D5 OUT
14 D4 OUT
13 D3 OUT

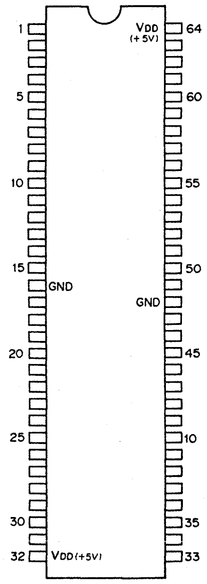

A0 A1 A2 A3 A4 A5 A6 A7 A8 A9 A10 A11 A12
D0 D1 D2 D3 D4 D5 D6 D7
CS
20

A0-A12 ; ADDRESS INPUTS
D0-D7 ; DATA OUTPUTS
$\overline{CS}$; CHIP SELECT INPUT
Vpp ; PROGRAM POWER SUPPLY

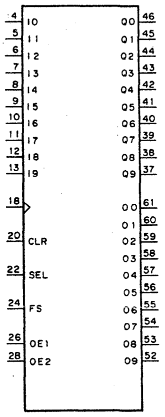

A0 – A4
4–8
ROW ADDRESS BUFFERS/ DECODER
EPROM ARRAY
SENSE AMP/ DATA IN BUFFERS OUTPUT BUFFERS
17–13 11–9
D0 – D7
1–3 18–23
A5 – A12
COLUMN ADDRESS BUFFERS/ DECODER
CS/VPP 20
POWER SWITCH /CONTROL LOGIC

MB650203 (FUJITSU)

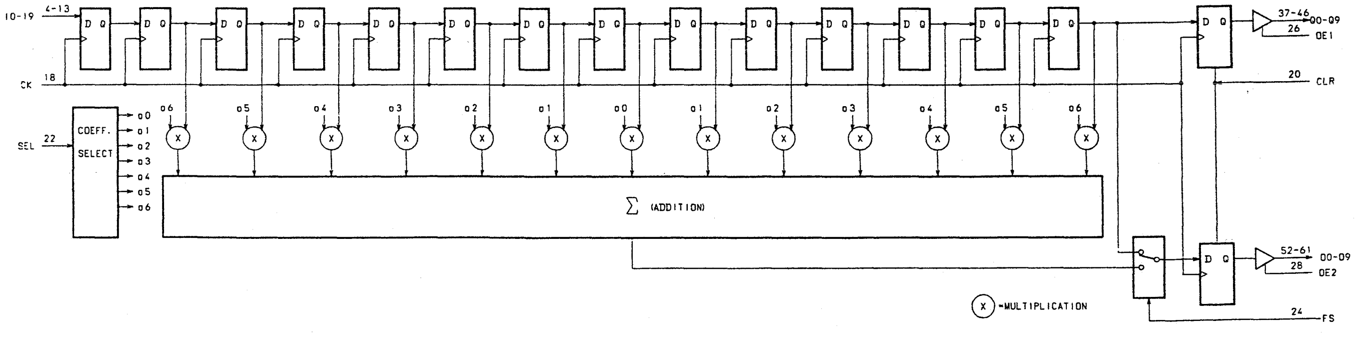
C-MOS FIR LOWPASS FILTER GATE ARRAY
– TOP VIEW –


1
5
10
15
20
25
30
32
64
60
55
50
45
10
35
33
VDD (+5V)
GND
GND
VDD (+5V)

PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	—		33	—	
2	—		34	—	
3	—		35	—	
4	I	I0	36	—	
5	I	I1	37	O	Q9
6	I	I2	38	O	Q8
7	I	I3	39	O	Q7
8	I	I4	40	O	Q6
9	I	I5	41	O	Q5
10	I	I6	42	O	Q4
11	I	I7	43	O	Q3
12	I	I8	44	O	Q2
13	I	I9	45	O	Q1
14	—		46	O	Q0
15	—		47	—	
16	—	GND	48	—	GND
17	—		49	—	
18	I	CK	50	—	
19	—		51	—	
20	I	CLR	52	O	O9
21	—		53	O	O8
22	I	SEL	54	O	O7
23	—		55	O	O6
24	I	FS	56	O	O5
25	—		57	O	O4
26	I	OE1	58	O	O3
27	—		59	O	O2
28	I	OE2	60	O	O1
29	—		61	O	O0
30	—		62	—	
31	—		63	—	
32	—	V_{DD}(+5V)	64	—	V_{DD}(+5V)


4 I0
5 I1
6 I2
7 I3
8 I4
9 I5
10 I6
11 I7
12 I8
13 I9
18
20 CLR
22 SEL
24 FS
26 OE1
28 OE2
Q0 46
Q1 45
Q2 44
Q3 43
Q4 42
Q5 41
Q6 40
Q7 39
Q8 38
Q9 37
O0 61
O1 60
O2 59
O3 58
O4 57
O5 56
O6 55
O7 54
O8 53
O9 52

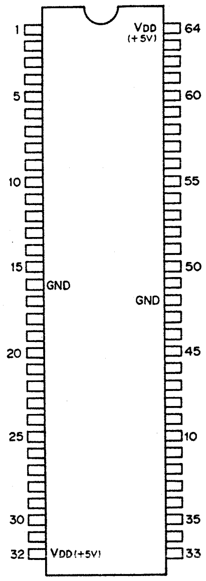
CK	:	13.5MHz CLOCK INPUT
CLR	:	OUTPUT CLEAR
FS	:	FILTER SELECT
I0 – I9	:	INPUT DATA
O0 – O9	:	FILTERED OUTPUT DATA
OE1, OE2	:	OUTPUT ENABLE
Q0 – Q9	:	UNFILTERED (DELAYED) OUTPUT DATA
SEL	:	FILTER MODE ASYNCHRONOUS SELECT


I0-I9
4-13
CK
18
SEL
22
COEFF. SELECT
α0
α1
α2
α3
α4
α5
α6
D Q
X
Σ (ADDITION)
37-46
Q0-Q9
26
OE1
20
CLR
52-61
O0-O9
28
OE2
24
FS
X =MULTIPLICATION

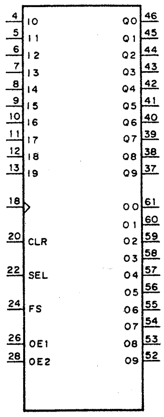
MB650207 (FUJITSU)

C-MOS FIR HIGHPASS FILTER GATE ARRAY

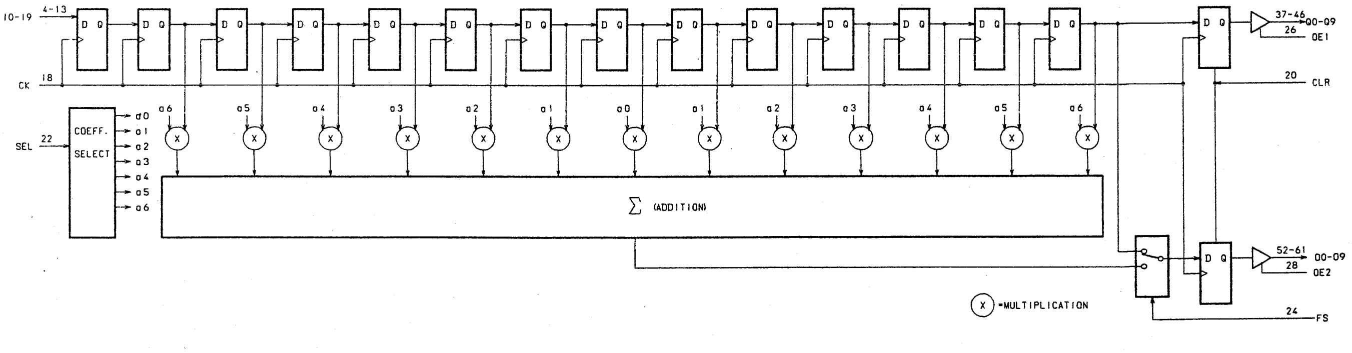
– TOP VIEW –


1
5
10
15
20
25
30
32
GND
VDD(+5V)
VDD
(+5V)
64
60
55
50
GND
45
10
35
33

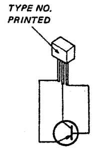
PIN NO.	I/O	SYMBOL	PIN NO.	I/O	SYMBOL
1	—		33	—	
2	—		34	—	
3	—		35	—	
4	I	I0	36	—	
5	I	I1	37	O	Q9
6	I	I2	38	O	Q8
7	I	I3	39	O	Q7
8	I	I4	40	O	Q6
9	I	I5	41	O	Q5
10	I	I6	42	O	Q4
11	I	I7	43	O	Q3
12	I	I8	44	O	Q2
13	I	I9	45	O	Q1
14	—		46	O	Q0
15	—		47	—	
16	—	GND	48	—	GND
17	—		49	—	
18	I	CK	50	—	
19	—		51	—	
20	I	CLR	52	O	O9
21	—		53	O	O8
22	I	SEL	54	O	O7
23	—		55	O	O6
24	I	FS	56	O	O5
25	—		57	O	O4
26	I	OE1	58	O	O3
27	—		59	O	O2
28	I	OE2	60	O	O1
29	—		61	O	O0
30	—		62	—	
31	—		63	—	
32	—	V_{DD}(+5V)	64	—	V_{DD}(+5V)


4 I0
5 I1
6 I2
7 I3
8 I4
9 I5
10 I6
11 I7
12 I8
13 I9
18
20 CLR
22 SEL
24 FS
26 OE1
28 OE2
Q0 46
Q1 45
Q2 44
Q3 43
Q4 42
Q5 41
Q6 40
Q7 39
Q8 38
Q9 37
O0 61
O1 60
O2 59
O3 58
O4 57
O5 56
O6 55
O7 54
O8 53
O9 52

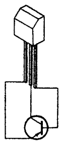
CK : 13.5MHz CLOCK INPUT
CLR : OUTPUT CLEAR
FS : FILTER SELECT
I0 – I9 : INPUT DATA
O0 – O9 : FILTERED OUTPUT DATA
OE1,OE2 : OUTPUT ENABLE
Q0 – Q9 : UNFILTERED (DELAYED) OUTPUT DATA
SEL : FILTER MODE ASYNCHRONOUS SELECT


I0-I9
4-13
CK
18
SEL
22
COEFF.
SELECT
a0
a1
a2
a3
a4
a5
a6
D Q
a6
a5
a4
a3
a2
a1
a0
a1
a2
a3
a4
a5
a6
X
∑ (ADDITION)
37-46
Q0-Q9
26
OE1
20
CLR
52-61
O0-O9
28
OE2
24
FS
X =MULTIPLICATION

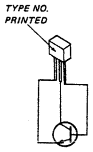
TRANSISTOR, DIODE


TYPE NO.
PRINTED

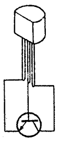
2SA1175
2SA1175F



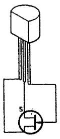
2SB733


TYPE NO.
PRINTED

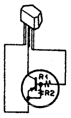
2SC2785F



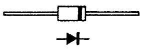
2SC2901



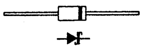
2SK152



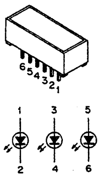
DTA144ES (R1=47K, R2=47K)



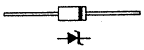
1S1555
1SS119



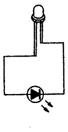
1SS97


6
5
4
3
2
1
1
3
5
2
4
6

LT9010H : YELLOW
LT9010N2 : YELLOWISH GREEN



RD ? ?ESB ?



TLG124 ; GREEN
TLR124 ; RED

SECTION 7
SCHEMATIC DIAGRAMS

The circuit information is provided below.

BVX-100/100P

Circuit Board	Circuit Function
DAD-6/P	ANALOGUE PROCESSOR
SEP-3/P	Y/C SEPARATION
DEC-47/P	DEMODULATION
VIO-14/P VA-84	ANALOGUE INPUT/OUTPUT
DSP-25	INDICATOR
SW-283B/C	INPUT SELECTOR
MB-236	MOTHER BOARD
PS-195	REGULATOR
EX-205	EXTENSION BOARD

BVR-51

Circuit Board	Circuit Function
RM-73	REMOTE CONTROL
RM-52C	REMOTE CONTROL
RM-60B	REMOTE CONTROL
RM-61B	REMOTE CONTROL

回路図内において、REF. NO の近傍に下記記号が記載されていますが、これは生産時の部品データです。

In the schematic diagrams, the following marks are described nearby reference number.
These are parts data at factory.

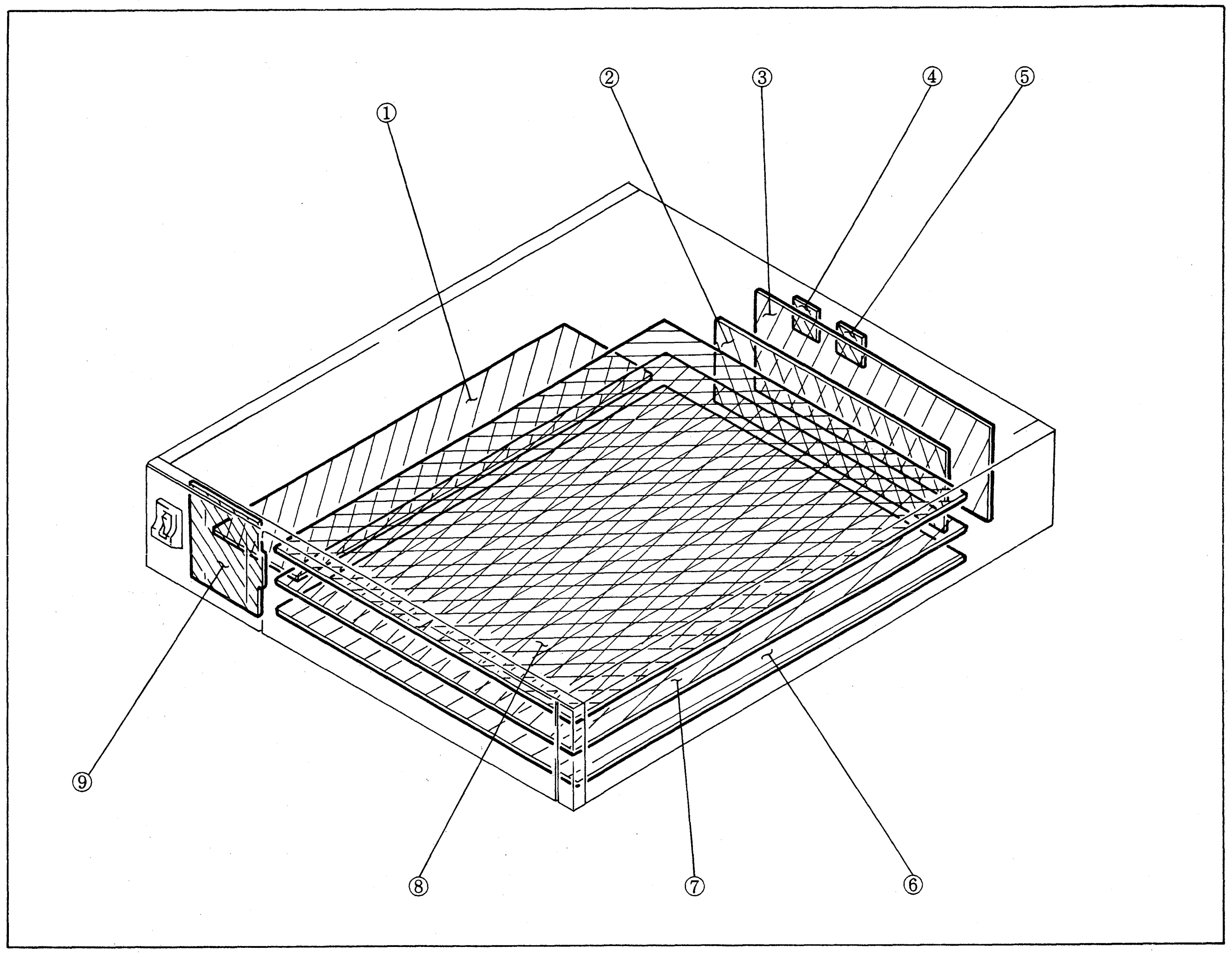
CAPACITOR (C)

AL AS	ELECTROLYTIC
TA	TANTALUM
CA CC CCS CM CS	CERAMIC
MPS PP PS PT	MYLAR
MD	DIPPED MICA
MS	MICA

RESISTOR (R)
VARIABLE RESISTOR (RV)

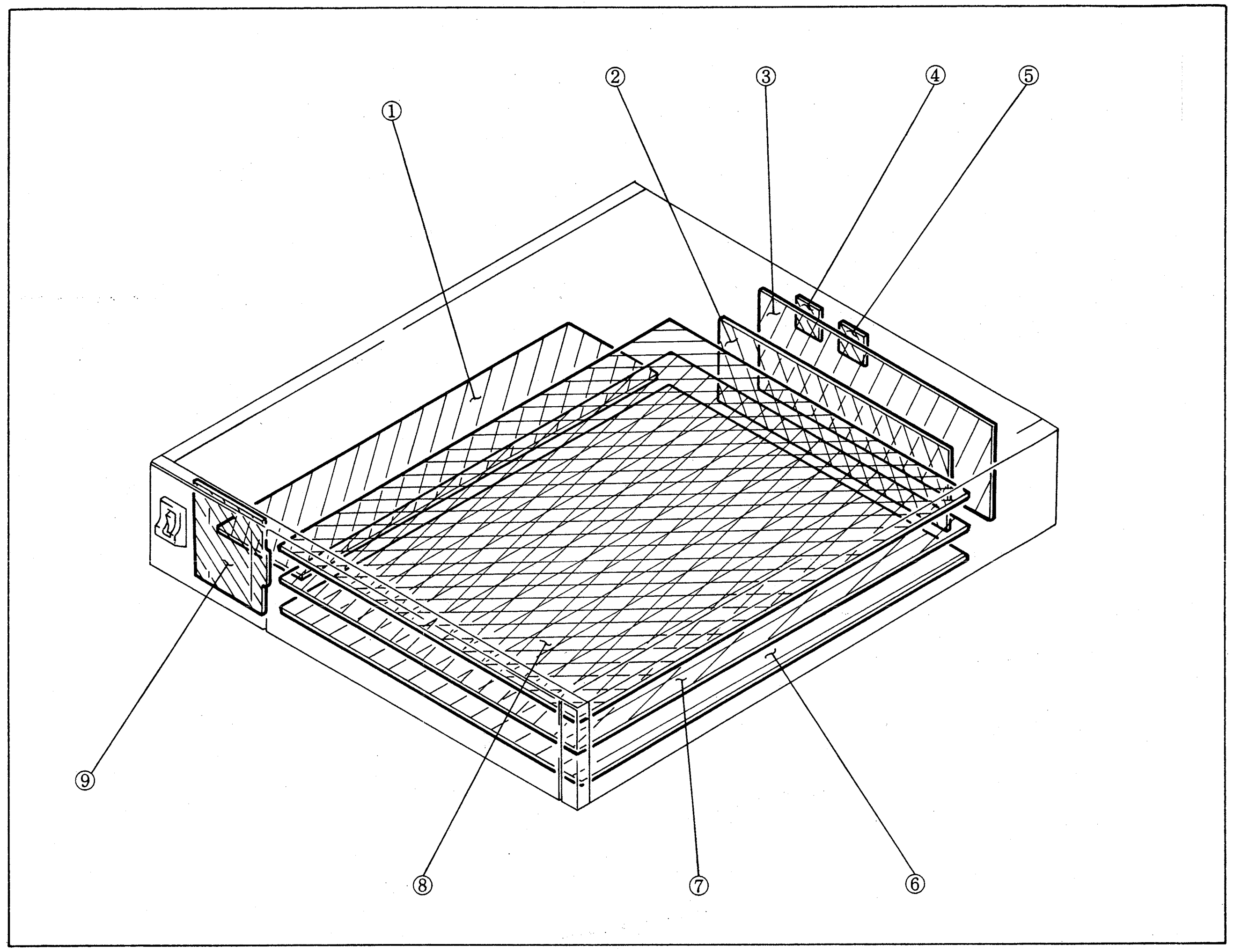
RC RD	CARBON
RF	FUSE
RN RS	METAL
RW	WIREWOUND

LOCATIONS OF PRINTED CIRCUIT BOARDS



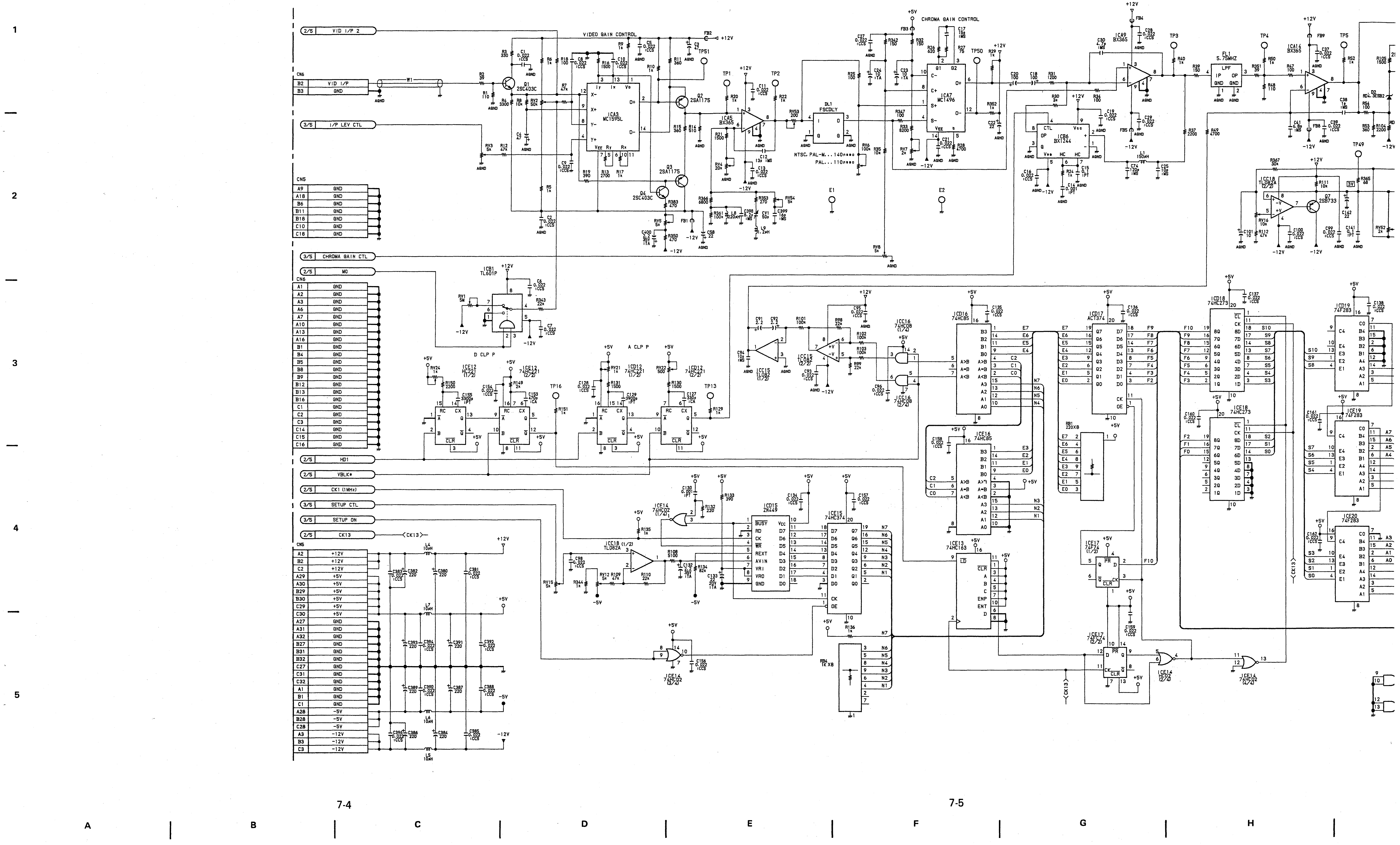
① PS-195
② MB-236
③ VIO-14/P
VA-84
④ SW-283B
⑤ SW-283C
⑥ SEP-3/P
⑦ DEC-47/P
⑧ DAD-6/P
⑨ DSP-25

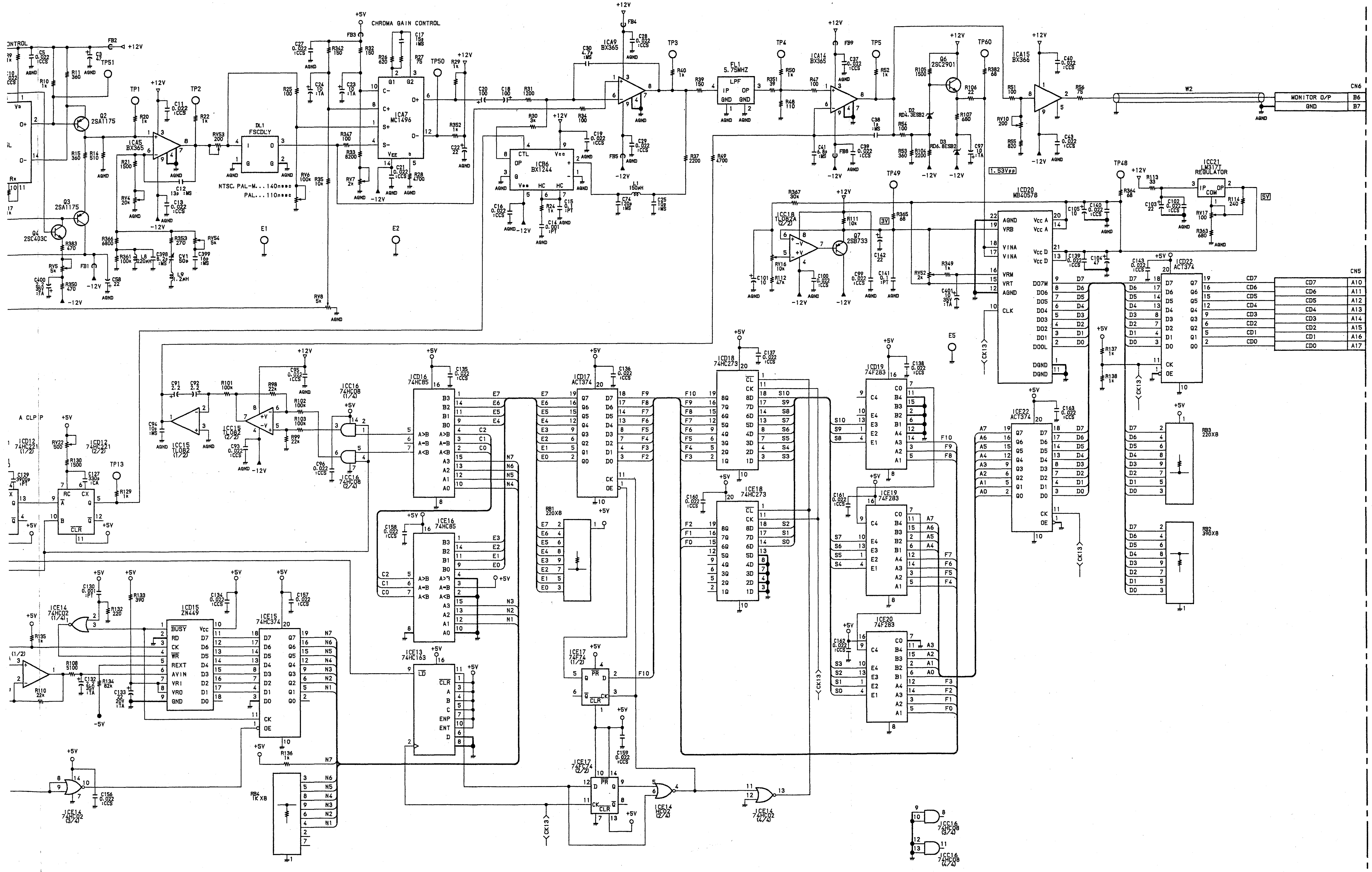
LOCATIONS OF PRINTED CIRCUIT BOARDS



① PS-195
② MB-236
③ VIO-14/P
VA-84
④ SW-283B
⑤ SW-283C
⑥ SEP-3/P
⑦ DEC-47/P
⑧ DAD-6/P
⑨ DSP-25

DAD-6/P (1/5); ANALOGUE PROCESSOR

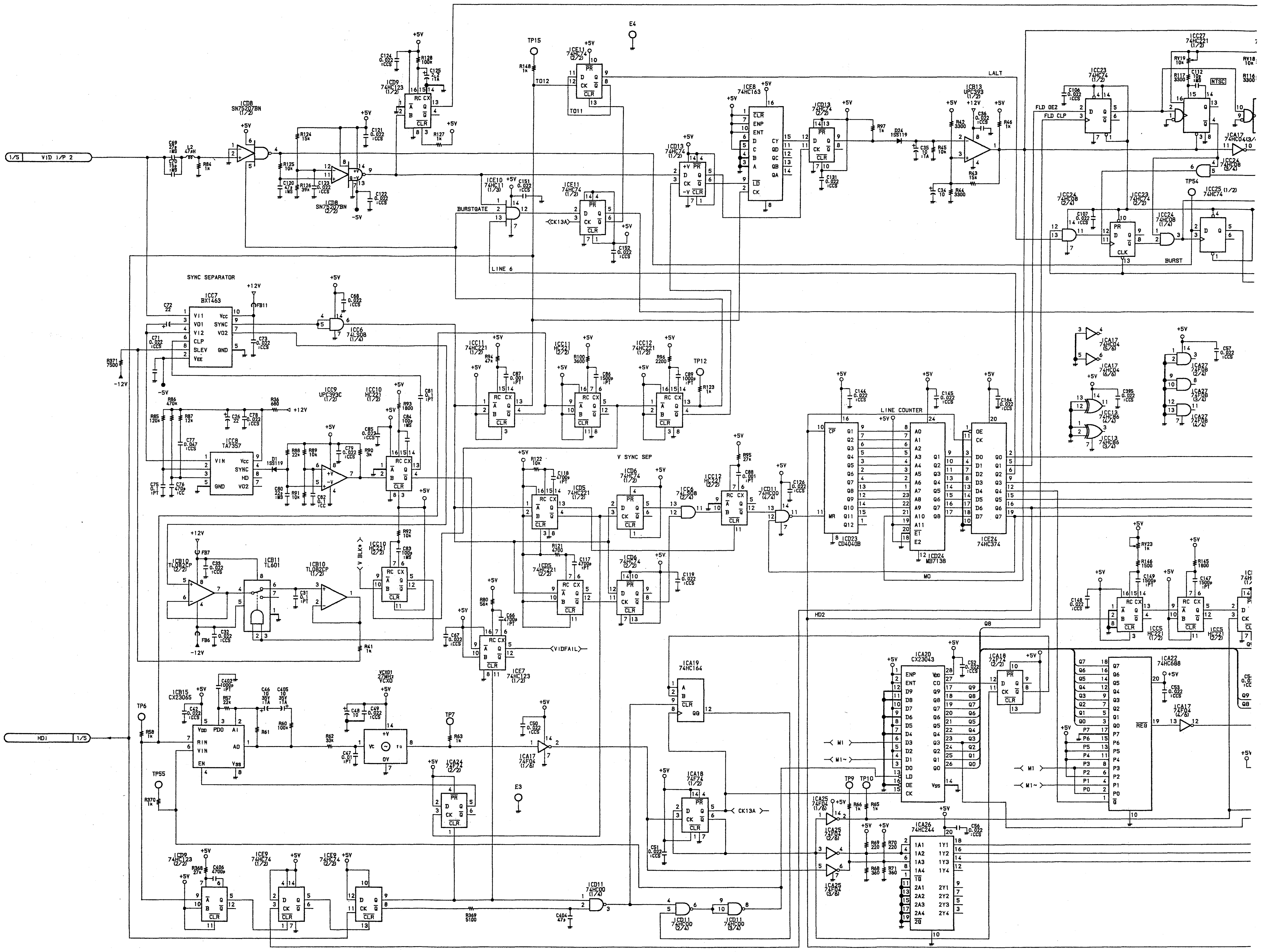

1
2
3
4
5
A
B
C
D
E
F
G
H
VID I/P 2
VID I/P
GND
I/P LEV CTL
CHROMA GAIN CTL
MO
HD1
VBLK*
CK1 (1MHz)
SETUP CTL
SETUP ON
CK13
CN5
CN6
VIDEO GAIN CONTROL
CHROMA GAIN CONTROL
ICA3 MC1595L
ICA5 BX365
ICA7 MC1496
ICA9 BX365
ICA14 BX365
ICB6 BX1244
ICB1 TL601P
DL1 FSCDLY
NTSC, PAL-M...140nsec
PAL...110nsec
FL1 5.75MHZ LPF
Q1 2SC403C
Q2 2SA1175
Q3 2SA1175
Q4 2SC403C
Q7 2SB733
D CLP P
A CLP P
ICE12 HC221
ICD12 74HC221
ICC15 TL082
ICC16 74HC08
ICD16 74HC85
ICE16 74HC85
ICD17 ACT374
ICD18 74HC273
ICE18 74HC273
ICD19 74F283
ICE19 74F283
ICE20 74F283
ICD15 ZN449
ICE15 74HC374
ICE13 74HC163
ICE14 74HC02
ICE17 74F74
ICC18 TL082A
ICC18 TL082A
+12V
+5V
-5V
-12V
AGND
TP1
TP2
TP3
TP4
TP5
TP13
TP16
TP49
TP50
TP51
E1
E2
RB1 220X8
RB4 1K X8


CHROMA GAIN CONTROL
ICA7 MC1496
ICA5 BX365
ICA9 BX365
ICA14 BX365
ICA15 BX366
ICB6 BX1244
DL1 FSCDLY
NTSC, PAL-M...140nsec
PAL...110nsec
FL1 5.75MHZ
LPF
Q2 2SA1175
Q3 2SA1175
Q4 2SC403C
Q6 2SC2901
Q7 2SB733
D2 RD4.3ESB2
D3 RD6.8ESB2
W2
MONITOR O/P
GND
CN6
B6
B7
CN5
1.53Vpp
ICD20 MB40578
ICC21 LM317T REGULATOR
ICC18 TL082A
ICD22 ACT374
ICE22 ACT374
ICD16 74HC85
ICE16 74HC85
ICD17 ACT374
ICD18 74HC273
ICE18 74HC273
ICD19 74F283
ICE19 74F283
ICE20 74F283
ICE13 74HC163
ICD15 ZN449
ICE15 74HC374
ICE14 74HC02
ICE17 74F74
ICC16 74HC08
ICC15 TL082
ICD12 74HC221
RB1 220X8
RB2 390X8
RB3 220X8
RB4 1K X8
CK13
A CLP P
TP1
TP2
TP3
TP4
TP5
TP13
TP48
TP49
TP50
TP51
TP60
E1
E2
E5
+12V
-12V
+5V
-5V
AGND
DGND
5V
3V

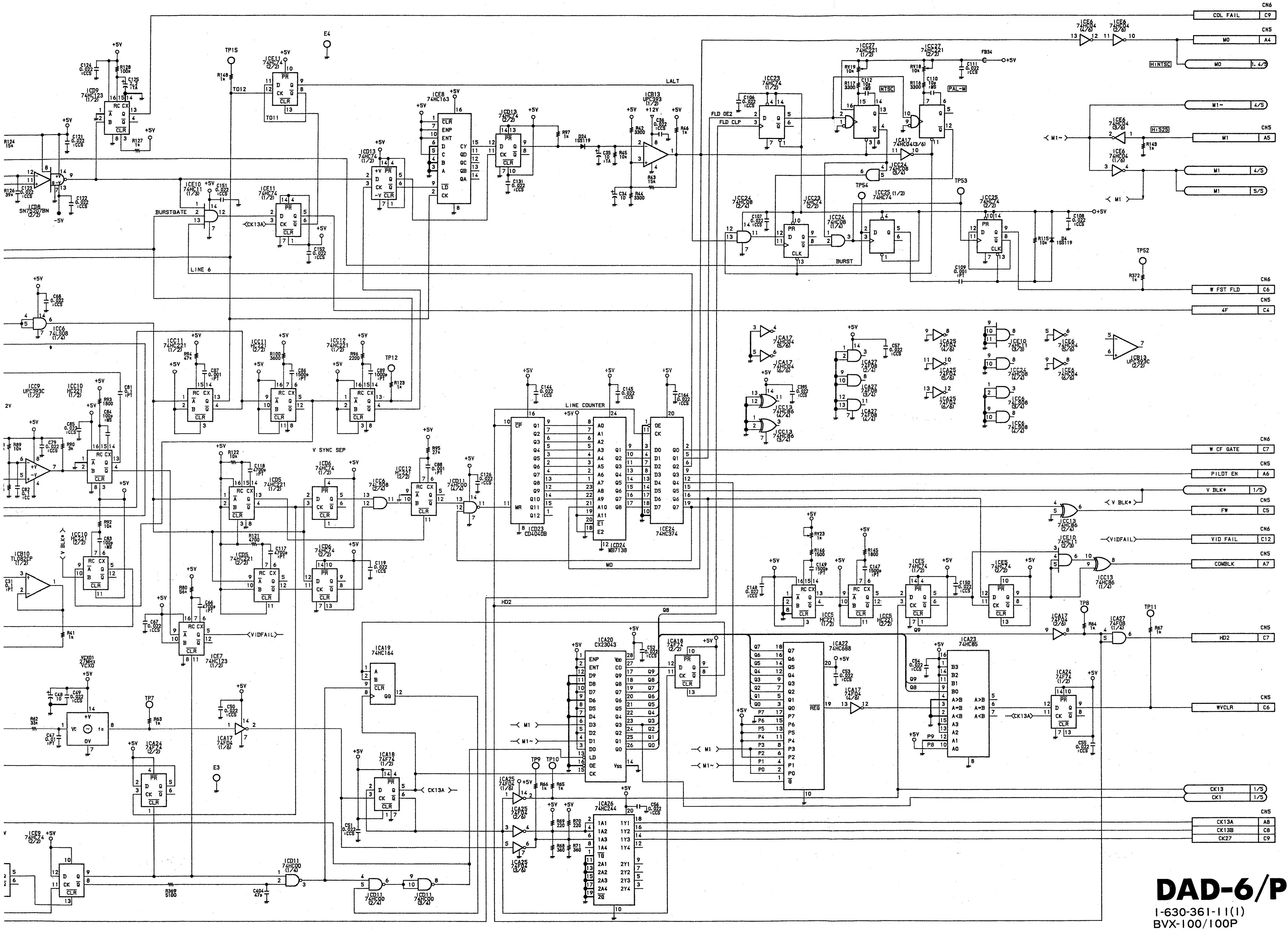
DAD-6/P(1/5)

1-630-361-11(1)
BVX-100/100P

DAD-6/P (2/5); ANALOGUE PROCESSOR


1
2
3
4
5
1/5
VID I/P 2
HDI
SYNC SEPARATOR
ICC7 BX1463
ICC8 TA7357
ICC9 UPC393C
ICC10 HC221
ICB10 TL082CP
ICB11 TL601
ICB15 CX23065
VCXO1 27MHz VCXO
ICD8 SN75207BN
ICD9 74HC123
ICE10 74HC11
ICE11 74HC74
ICE8 74HC163
ICD13 74HC74
ICB13 UPC393
ICC23 74HC74
ICC27 74HC221
ICC24 74HC08
ICC25 74HC74
ICC11 74HC221
ICC12 74HC221
ICD5 74HC221
ICD6 74HC74
ICC6 74LS08
ICD11 74HC00
ICD23 CD4040B
ICD24 MB7138
ICE24 74HC374
LINE COUNTER
Y SYNC SEP
ICE7 74HC123
ICA19 74HC164
ICA18 74F74
ICA20 CX23043
ICA22 74HC688
ICA25 74F04
ICA26 74HC244
ICA17 74F04
ICA24 74F74
ICE9 74HC74
ICA27 74F08
ICC13 74HC86
TP6
TP7
TP9
TP10
TP12
TP15
TP54
TP55
E3
E4
LALT
FLD OE2
FLD CLP
NTSC
BURST
BURSTGATE
LINE 6
TD11
TD12
CK13A
VIDFAIL
V BLK
HD2
Q8
MO
M1
M1~
+5V
+12V
-12V
-5V

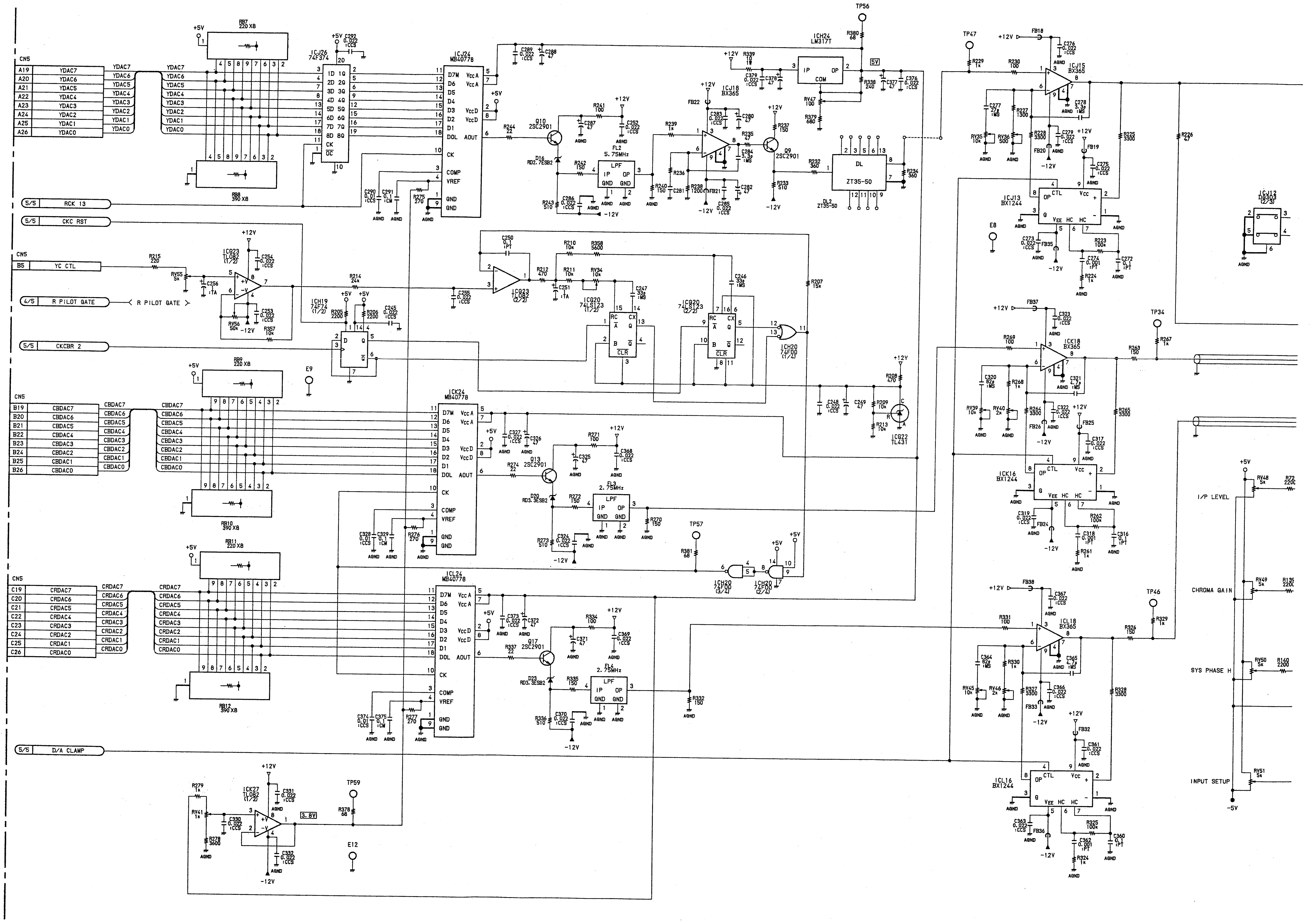
A | B | C | D | E | F | G | H |

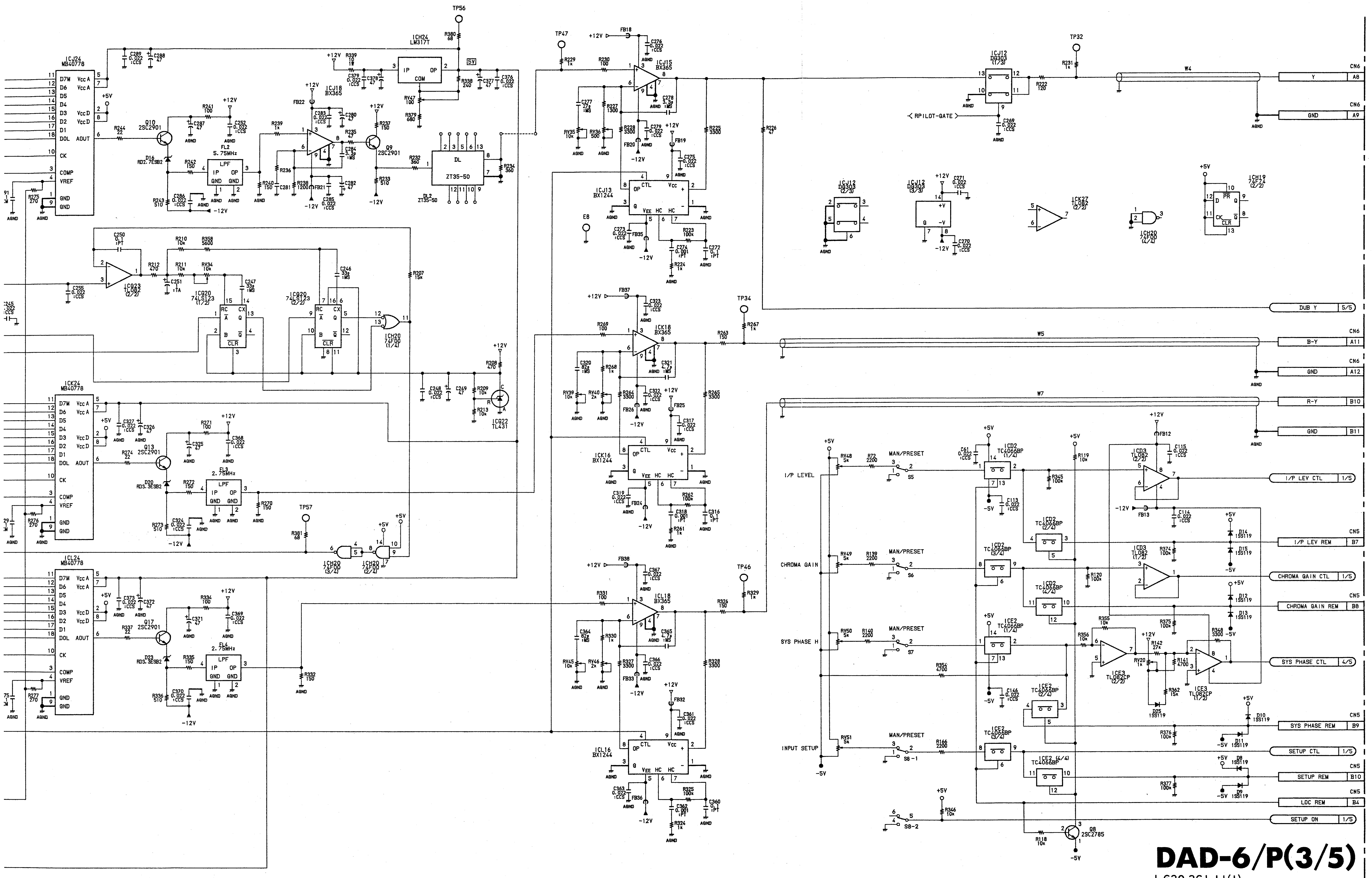

CN6
COL FAIL C9
CN5
MO A4
H:NTSC
MO 1/5
M1~ 4/5
CN5
H:525
M1 A5
M1 4/5
M1 5/5
CN6
W FST FLD C6
CN5
4F C4
CN6
W CF GATE C7
CN5
PILOT EN A6
V BLK* 1/5
CN5
FW C5
CN6
VID FAIL C12
CN5
COMBLK A7
CN5
HD2 C7
CN5
WVCLR C6
CK13 1/5
CK1 1/5
CN5
CK13A A8
CK13B C8
CK27 C9
TP15
E4
TP12
TP54
TPS3
TPS2
TP7
E3
TP8
TP11
TP9
TP10
LALT
FLD OE2
FLD CLP
NTSC
PAL-M
BURST
BURSTGATE
LINE 6
V SYNC SEP
LINE COUNTER
MO
HD2
Q8
TO12
TO11
ICD9 74HC123
ICE11 74HC74
ICE8 74HC163
ICD12 74HC74
ICB13 UPC393
ICD13 74HC74
ICE10 74HC11
ICC23 74HC74
ICC27 74HC221
ICC24 74HC08
ICC25 74HC74
ICE6 74HC04
ICA17 74F04
ICC13 74HC86
ICA27 74F08
ICA25 74F04
ICC6 74LS08
ICC11 74HC221
ICC12 74HC221
ICC9 UPC393C
ICC10 HC221
ICB10 TL082CP
ICD5 74HC221
ICD6 74HC74
ICC12 HC221
ICD11 74HC00
ICD23 CD4040B
ICD24 MB7138
ICE22 74HC374
ICE7 74HC123
ICE5 74HC74
ICC5 HC221
ICE10 74HC11
ICA19 74HC164
ICA20 CX23043
ICA18 74F74
ICA22 74HC688
ICA23 74HC85
ICA24 74F74
ICA26 74HC244
ICE9 74HC74
VCXO1 27MHz VCXO
ICB8 SN75207BN

DAD-6/P(2/5)

1-630-361-11(1)
BVX-100/100P

DAD-6/P (3/5); ANALOGUE PROCESSOR


1
2
3
4
5
CN5
YDAC7
YDAC6
YDAC5
YDAC4
YDAC3
YDAC2
YDAC1
YDAC0
RB7 220 X8
RB8 390 X8
ICJ26 74F374
ICJ24 MB40778
RCK 13
CKC RST
YC CTL
R PILOT GATE
CKCBR 2
ICG23 TL082
ICH19 74F74
ICG20 74LS123
ICH20 74F00
CBDAC7
CBDAC6
CBDAC5
CBDAC4
CBDAC3
CBDAC2
CBDAC1
CBDAC0
RB9 220 X8
RB10 390 X8
ICK24 MB40778
CRDAC7
CRDAC6
CRDAC5
CRDAC4
CRDAC3
CRDAC2
CRDAC1
CRDAC0
RB11 220 X8
RB12 390 X8
ICL24 MB40778
D/A CLAMP
ICK27 TL082
3.8V
TP56
TP57
TP59
TP47
TP34
TP46
E8
E9
E12
ICH24 LM317T
5V
ICJ18 BX365
Q10 2SC2901
Q9 2SC2901
Q13 2SC2901
Q17 2SC2901
FL2 5.75MHz
FL3 2.75MHz
FL4 2.75MHz
LPF
DL2 ZT35-50
ICG22 TL431
ICJ15 BX365
ICJ13 BX1244
ICK18 BX365
ICK16 BX1244
ICL18 BX365
ICL16 BX1244
ICJ12 DG303 (2/3)
I/P LEVEL
CHROMA GAIN
SYS PHASE H
INPUT SETUP
+12V
-12V
+5V
-5V
AGND
A
B
C
D
E
F
G
H

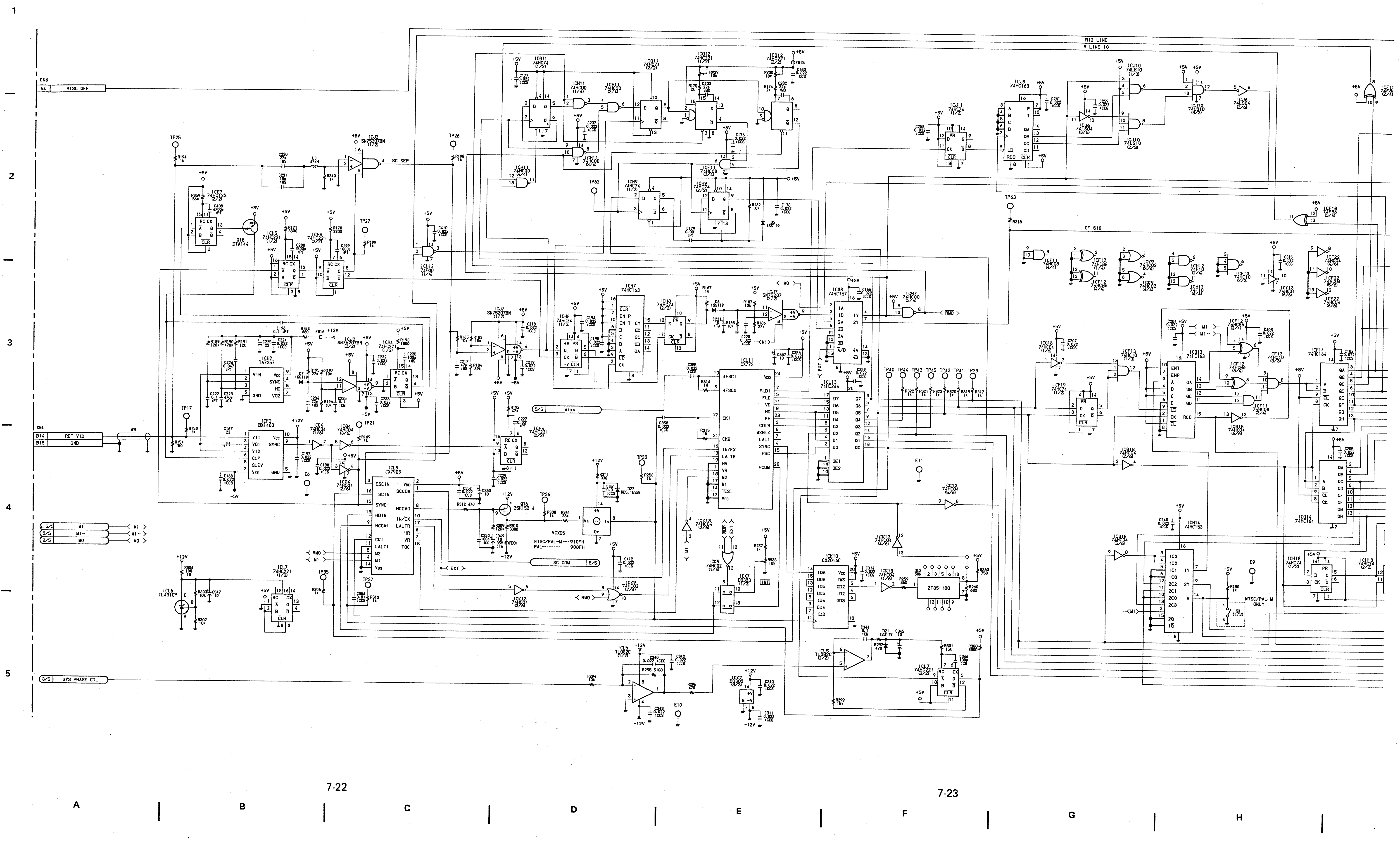

ICJ24
MB40778
ICK24
MB40778
ICL24
MB40778
D7M
Vcc A
DOL
AOUT
CK
COMP
VREF
GND
Q10
2SC2901
Q13
2SC2901
Q17
2SC2901
D16
RD2.7ESB2
D20
RD3.3ESB2
D23
RD3.3ESB2
FL2
5.75MHz
FL3
2.75MHz
FL4
2.75MHz
LPF
IP
OP
ICJ18
BX365
Q9
2SC2901
ICH24
LM317T
COM
TP56
5V
DL
ZT35-50
DL2
ZT35-50
ICG23
TL082
(2/2)
ICG20
74LS123
(1/2)
(2/2)
ICH20
74F00
(1/4)
(3/4)
(2/4)
ICG22
TL431
TP57
TP47
TP34
TP46
TP32
ICJ15
BX365
ICK18
BX365
ICL18
BX365
ICJ13
BX1244
ICK16
BX1244
ICL16
BX1244
CTL
Vcc
VEE
HC
E8
+12V
-12V
+5V
-5V
AGND
ICJ12
DG303
(1/3)
(2/3)
(3/3)
RPILOT-GATE
ICK27
TL082
(2/2)
ICH20
74F00
(4/4)
ICH19
74F74
(2/2)
W4
W5
W7
Y
GND
B-Y
R-Y
DUB Y
CN6
A8
A9
A11
A12
B10
B11
5/5
I/P LEVEL
CHROMA GAIN
SYS PHASE H
INPUT SETUP
MAN/PRESET
S5
S6
S7
S8-1
S8-2
RV48
RV49
RV50
RV51
ICD2
TC4066BP
ICE2
TC4066BP
ICD3
TL082
ICE3
TL082CP
I/P LEV CTL
I/P LEV REM
CHROMA GAIN CTL
CHROMA GAIN REM
SYS PHASE CTL
SYS PHASE REM
SETUP CTL
SETUP REM
LOC REM
SETUP ON
CN5
B7
B8
B9
B10
B4
1/5
4/5
Q8
2SC2785
1SS119

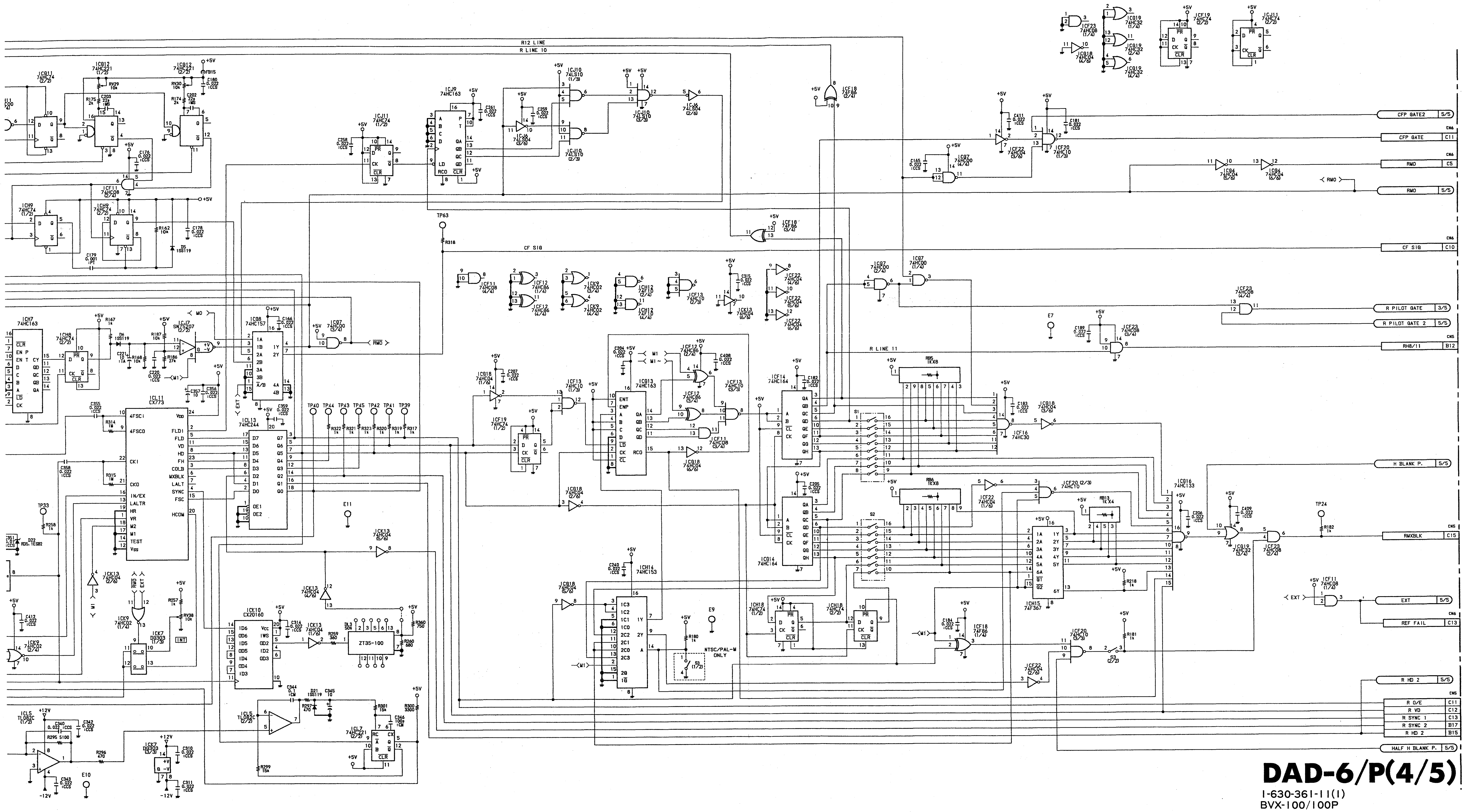
DAD-6/P(3/5)

1-630-361-11(1)
BVX-100/100P

E F G H I J K L

DAD-6/P (4/5); ANALOGUE PROCESSOR

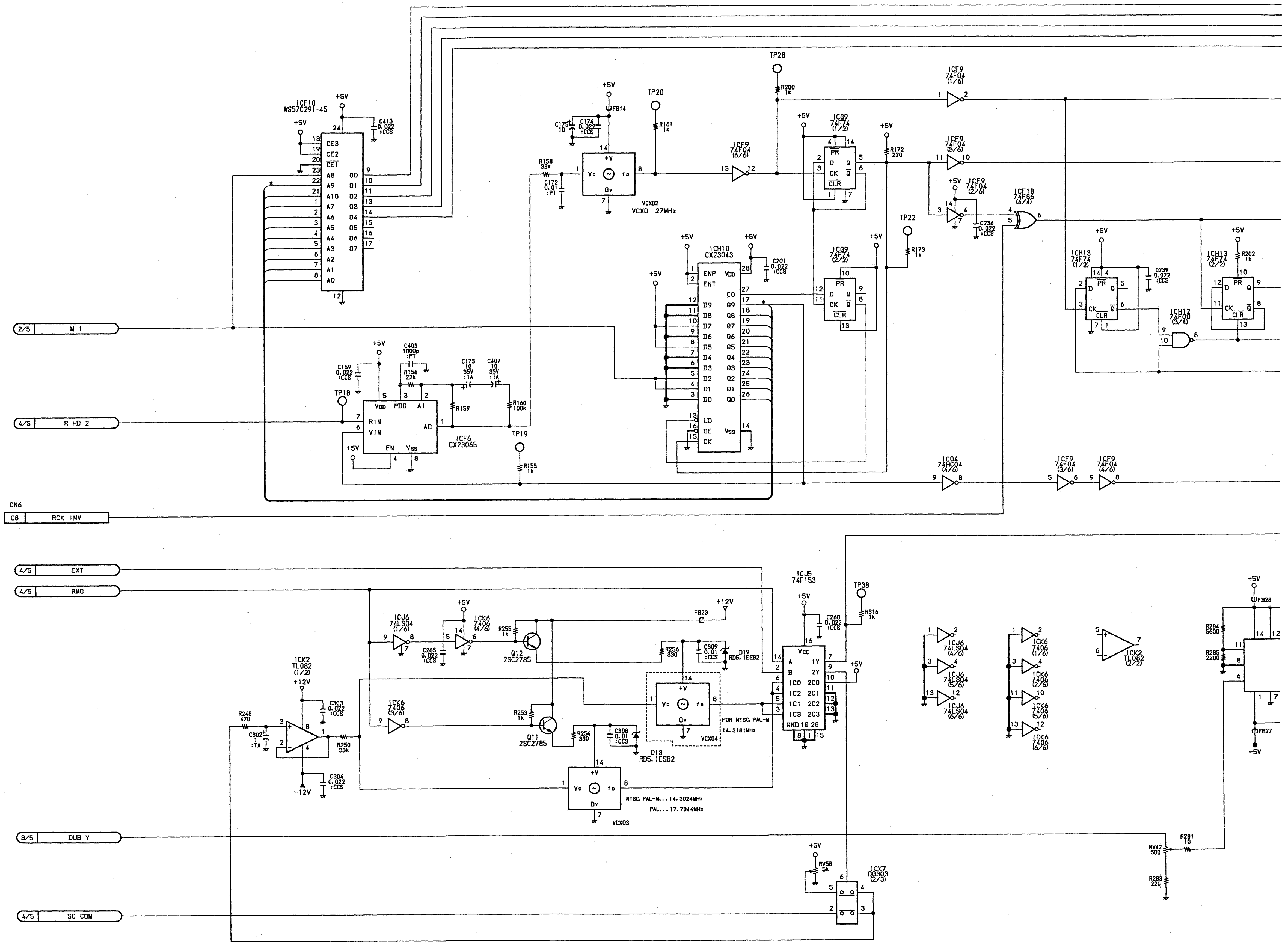

1
2
3
4
5
A
B
C
D
E
F
G
H
CN6
A4 VISC OFF
B14 REF VID
B15 GND
2/S M1
2/S M1~
2/S MO
3/S SYS PHASE CTL
R12 LINE
R LINE 10
SC SEP
CF SIG
S/S 4fsc
SC COM S/S
RMO
M1
EXT
ICJ2 SN75207BN (1/2)
ICF7 74HC123 (2/2)
Q18 DTA144
ICH5 74HC221 (1/2)
ICH5 74HC221 (2/2)
ICH7 TA7357
ICJ2 SN75207BN (2/2)
ICH4 74HC221 (1/2)
ICF2 BX1463
ICG4 74HC04 (1/6)
ICG4 74HC04 (5/6)
ICL9 CX7903
ICL6 TL431CP
ICL7 74HC221 (1/2)
ICH12 74F00 (1/4)
ICJ7 SN75207BN (1/2)
Q16 2SK152-4
VCXO5
NTSC/PAL-M---910FH
PAL-----------908FH
ICH8 74HC74 (1/2)
ICH7 74HC163
ICH8 74HC74 (2/2)
ICJ7 SN75207 (2/2)
ICL11 CX773
ICG11 74HC74
ICH11 74HC00 (1/4)
ICB11 74HC74 (2/2)
ICG12 74HC221 (1/2)
ICG12 74HC221 (2/2)
ICH11 74HC00 (3/4)
ICF11 74HC08 (2/4)
ICH9 74HC74 (1/2)
ICH9 74HC74 (2/2)
D5 1SS119
ICG8 74HC157
ICG7 74HC00 (3/4)
ICL13 74HC244
ICK13 74HC04
ICK9 74HC02 (2/4)
ICK7 DG303 (1/2)
ICK10 CX20160
ZT35-100
ICL5 TL082C (1/2)
ICL5 TL082C (2/2)
ICL7 74HC221 (2/2)
ICJ9 74HC163
ICJ11 74HC74 (1/2)
ICJ10 74LS10 (1/3)
ICJ10 74LS10 (3/3)
ICJ10 74LS10 (2/3)
ICJ6 74LS04 (2/6)
ICF18 74F86 (3/4)
ICG18 74HC04 (1/6)
ICF19 74HC74 (1/2)
ICG13 74HC163
ICF13 74HC10 (1/3)
ICF12 74HC86 (3/4)
ICF11 74HC08
ICF14 74HC164
ICG14 74HC164
ICH14 74HC153
ICH18 74HC74 (1/2)
NTSC/PAL-M ONLY
S5 (1/2)
TP17
TP21
TP25
TP26
TP27
TP33
TP35
TP36
TP37
TP39
TP40
TP41
TP42
TP43
TP44
TP45
TP62
TP63
E6
E9
E10
E11


R12 LINE
R LINE 10
R LINE 11
CF SIG
ICJ9 74HC163
ICJ10 74LS10
ICJ11 74HC74
ICF18 74F86
ICF12 74HC86
ICK9 74HC02
ICH12 74F10
ICF13 74HC10
ICK13 74HC04
ICF22 74HC04
ICF11 74HC08
ICF19 74HC74
ICF20 74HC10
ICF23 74HC08
ICG7 74HC00
ICG8 74HC157
ICL11 CX773
ICL13 74HC244
ICH7 74HC163
ICH8 74HC74
ICJ7 SN75207
ICK10 CX20160
ICL5 TL082C
ICL7 74HC221
ICK7 DG303
ICG12 74HC221
ICG11 74HC74
ICH9 74HC74
ICH14 74HC153
ICH13 74HC163
ICF14 74HC164
ICG14 74HC164
ICF16 74HC30
ICG16 74HC133
ICH15 74F367
ICH18 74HC74
ICG18 74HC04
ICG19 74HC32
ICG4 74HC04
ZT35-100
S1
S2
S3
NTSC/PAL-M ONLY
TP33
TP39
TP40
TP41
TP42
TP43
TP44
TP45
TP63
TP24
E7
E9
E10
E11
CFP GATE2 S/S
CFP GATE C11
RMO C5
RMO S/S
CF SIG C10
R PILOT GATE S/S
R PILOT GATE 2 S/S
RH8/11 B12
H BLANK P. S/S
RMXBLK C15
EXT S/S
REF FAIL C13
R HD 2 S/S
R O/E C11
R VD C12
R SYNC 1 C13
R SYNC 2 B17
R HD 2 B15
HALF H BLANK P. S/S
CN6
CN5
E
F
G
H
I
J
K
L

DAD-6/P(4/5)

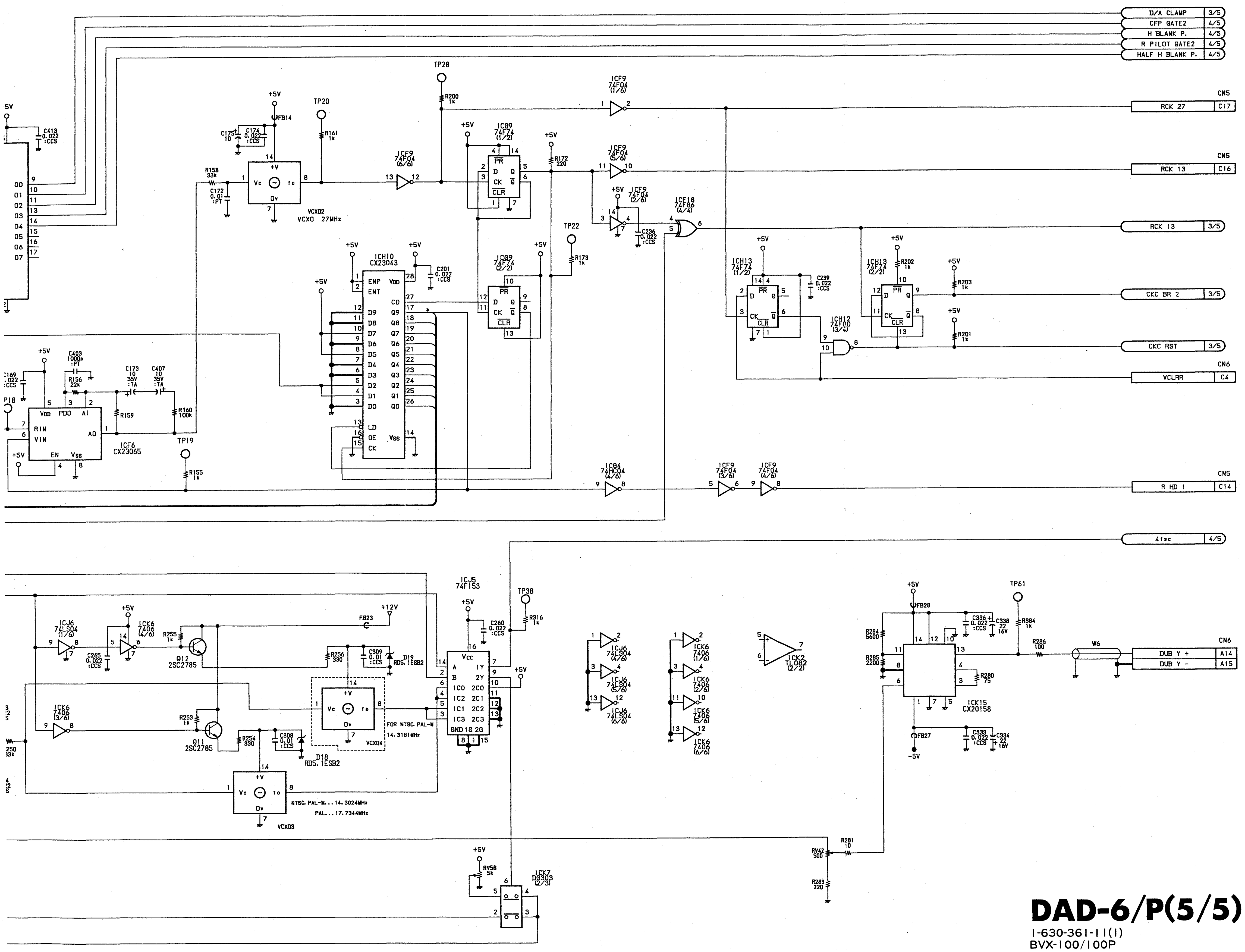
1-630-361-11(1)
BVX-100/100P

DAD-6/P (5/5); ANALOGUE PROCESSOR


ICF10
WS57C291-45
C413 0.022 :CCS
CE3
CE2
CE1
A8
A9
A10
A7
A6
A5
A4
A3
A2
A1
A0
O0
O1
O2
O3
O4
O5
O6
O7
+5V
TP28
R200 1k
TP20
R161 1k
FB14
C175 10
C174 0.022 :CCS
R158 33k
C172 0.01 :PT
Vc
fo
+V
Ov
VCX02
VCXO 27MHz
ICF9 74F04 (2/6)
ICF9 74F04 (1/6)
IC89 74F74 (1/2)
PR
D
Q
CK
CLR
R172 220
ICF9 74F04 (5/6)
ICF9 74F04 (2/6)
C236 0.022 :CCS
ICF18 74F86 (4/4)
TP22
R173 1k
IC89 74F74 (2/2)
ICH10
CX23043
ENP
ENT
VDD
CO
D9
D8
D7
D6
D5
D4
D3
D2
D1
D0
Q9
Q8
Q7
Q6
Q5
Q4
Q3
Q2
Q1
Q0
LD
OE
CK
VSS
C201 0.022 :CCS
ICH13 74F74 (1/2)
C239 0.022 :CCS
ICH13 74F74 (2/2)
R202 1k
ICH12 74F00 (3/4)
2/5
M 1
4/5
R HD 2
C169 0.022 :CCS
C403 1000p :PT
R156 22k
C173 10 35V :TA
C407 10 35V :TA
R159
R160 100k
TP18
RIN
VIN
EN
VSS
PDO
AI
AO
ICF6
CX23065
TP19
R155 1k
IC84 74HC04 (4/6)
ICF9 74F04 (3/6)
ICF9 74F04 (4/6)
CN6
C8
RCK INV
4/5
EXT
4/5
RMO
3/5
DUB Y
4/5
SC COM
ICJ6 74LS04 (1/6)
ICK6 7406 (4/6)
C265 0.022 :CCS
R255 1k
Q12 2SC2785
+12V
FB23
R256 330
C309 0.01 :CCS
D19 RD5.1ESB2
ICK6 7406 (3/6)
R253 1k
Q11 2SC2785
R254 330
C308 0.01 :CCS
D18 RD5.1ESB2
VCX04
FOR NTSC, PAL-M
14.3181MHz
VCX03
NTSC, PAL-M... 14.3024MHz
PAL... 17.7344MHz
ICK2 TL082 (1/2)
R248 470
C302 1 :TA
C303 0.022 :CCS
C304 0.022 :CCS
R250 33k
-12V
ICJ5 74F153
TP38
R316 1k
C260 0.022 :CCS
Vcc
A
B
1C0
1C1
1C2
1C3
1Y
2Y
2C0
2C1
2C2
2C3
GND 1G 2G
ICJ6 74LS04 (4/6)
ICJ6 74LS04 (5/6)
ICJ6 74LS04 (6/6)
ICK6 7406 (1/6)
ICK6 7406 (2/6)
ICK6 7406 (5/6)
ICK6 7406 (6/6)
ICK2 TL082 (2/2)
RV58 5k
ICK7 D8303 (2/3)
FB28
R284 5600
R285 2200
FB27
-5V
RV42 500
R281 10
R283 220

1
2
3
4
5

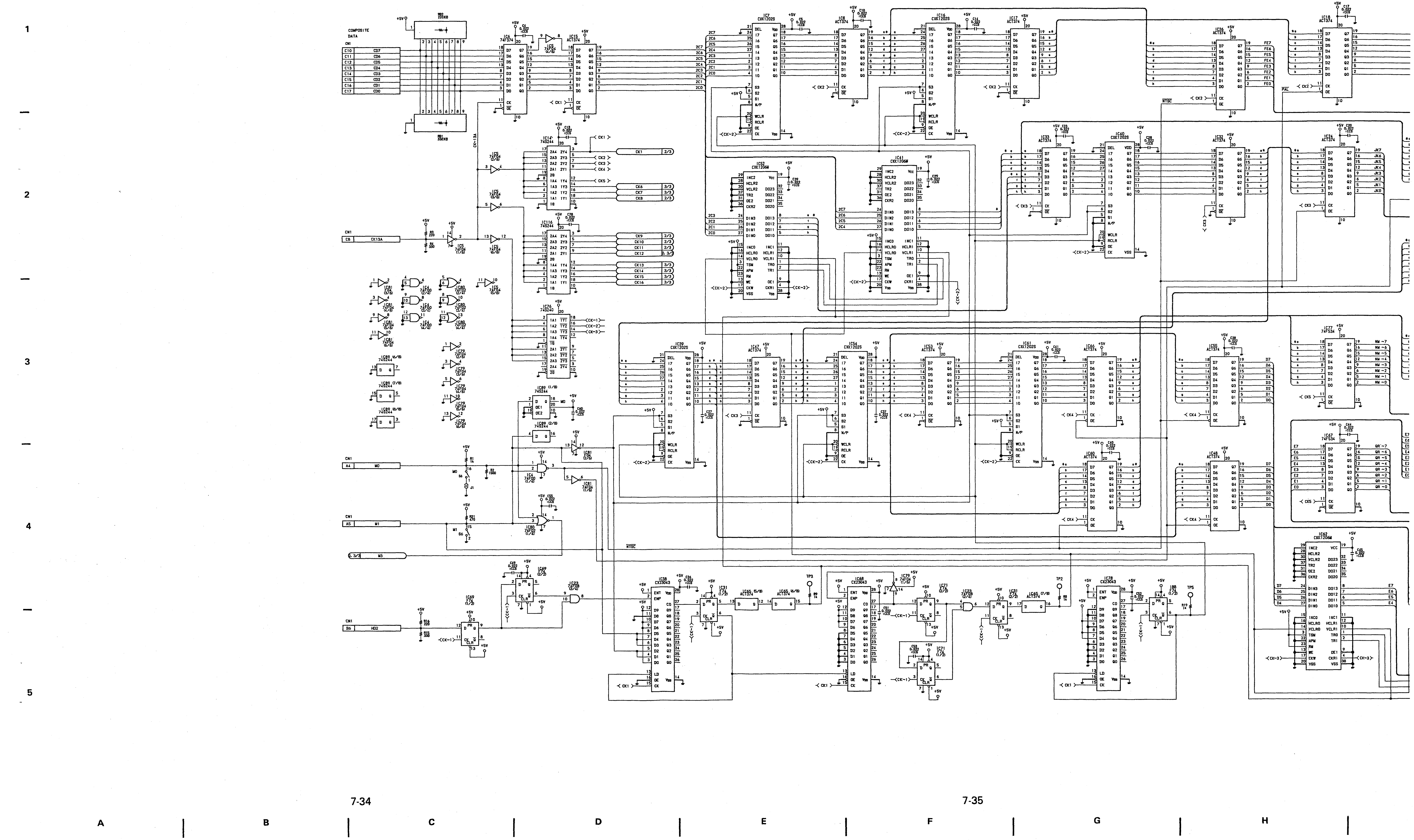
A B C D E F G H

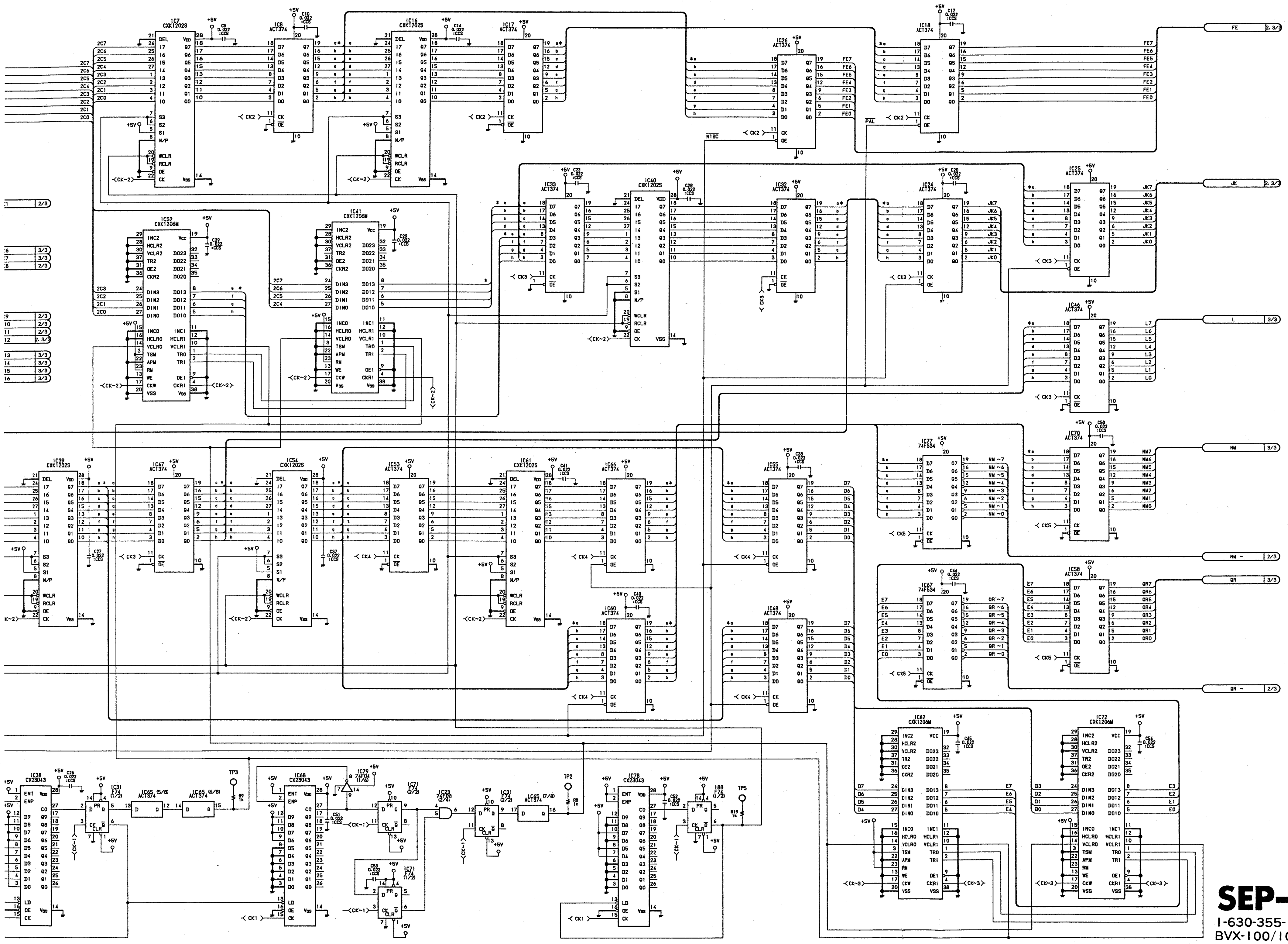

D/A CLAMP 3/5
CFP GATE2 4/5
H BLANK P. 4/5
R PILOT GATE2 4/5
HALF H BLANK P. 4/5
TP28
R200 1k
ICF9 74F04 (1/6)
CN5
RCK 27 C17
RCK 13 C16
RCK 13 3/5
CKC BR 2 3/5
CKC RST 3/5
CN6
VCLRR C4
R HD 1 C14
4fsc 4/5
+5V
TP20
R161 1k
FB14
C175 10
C174 0.022 :CCS
C413 0.022 :CCS
R158 33k
C172 0.01 :PT
VCX02 VCXO 27MHz
ICF9 74F04 (6/6)
ICG9 74F74 (1/2)
ICG9 74F74 (2/2)
R172 220
ICF9 74F04 (5/6)
ICF9 74F04 (2/6)
C236 0.022 :CCS
ICF18 74F86 (4/4)
TP22
R173 1k
ICH10 CX23043
C201 0.022 :CCS
ICH13 74F74 (1/2)
ICH13 74F74 (2/2)
C239 0.022 :CCS
ICH12 74F00 (3/4)
R202 1k
R203 1k
R201 1k
C403 1000p :PT
R156 22k
C173 10 35V :TA
C407 10 35V :TA
C169 0.022 :CCS
TP18
R159
R160 100k
ICF6 CX23065
TP19
R155 1k
ICG4 74HC04 (4/6)
ICF9 74F04 (3/6)
ICF9 74F04 (4/6)
00 01 02 03 04 05 06 07
ICJ6 74LS04 (1/6)
ICK6 7406 (4/6)
R255 1k
Q12 2SC2785
C265 0.022 :CCS
+12V
FB23
R256 330
C309 0.01 :CCS
D19 RD5.1ESB2
VCX04
FOR NTSC, PAL-M 14.3181MHz
ICK6 7406 (3/6)
R253 1k
Q11 2SC2785
R254 330
C308 0.01 :CCS
D18 RD5.1ESB2
VCX03
NTSC, PAL-M...14.3024MHz
PAL...17.7344MHz
R250 33k
ICJ5 74F153
C260 0.022 :CCS
TP38
R316 1k
ICJ6 74LS04 (4/6)
ICJ6 74LS04 (5/6)
ICJ6 74LS04 (6/6)
ICK6 7406 (1/6)
ICK6 7406 (2/6)
ICK6 7406 (5/6)
ICK6 7406 (6/6)
ICK2 TL082 (2/2)
FB28
C336 0.022 :CCS
C338 22 16V
TP61
R384 1k
R284 5600
R285 2200
R280 75
R286 100
W6
DUB Y + A14
DUB Y - A15
ICK15 CX20158
FB27
C333 0.022 :CCS
C334 22 16V
-5V
RV58 5k
ICK7 DG303 (2/3)
RV42 500
R281 10
R283 220

DAD-6/P(5/5)

1-630-361-11(1)
BVX-100/100P

SEP-3/P (1/3); Y/C SEPARATION

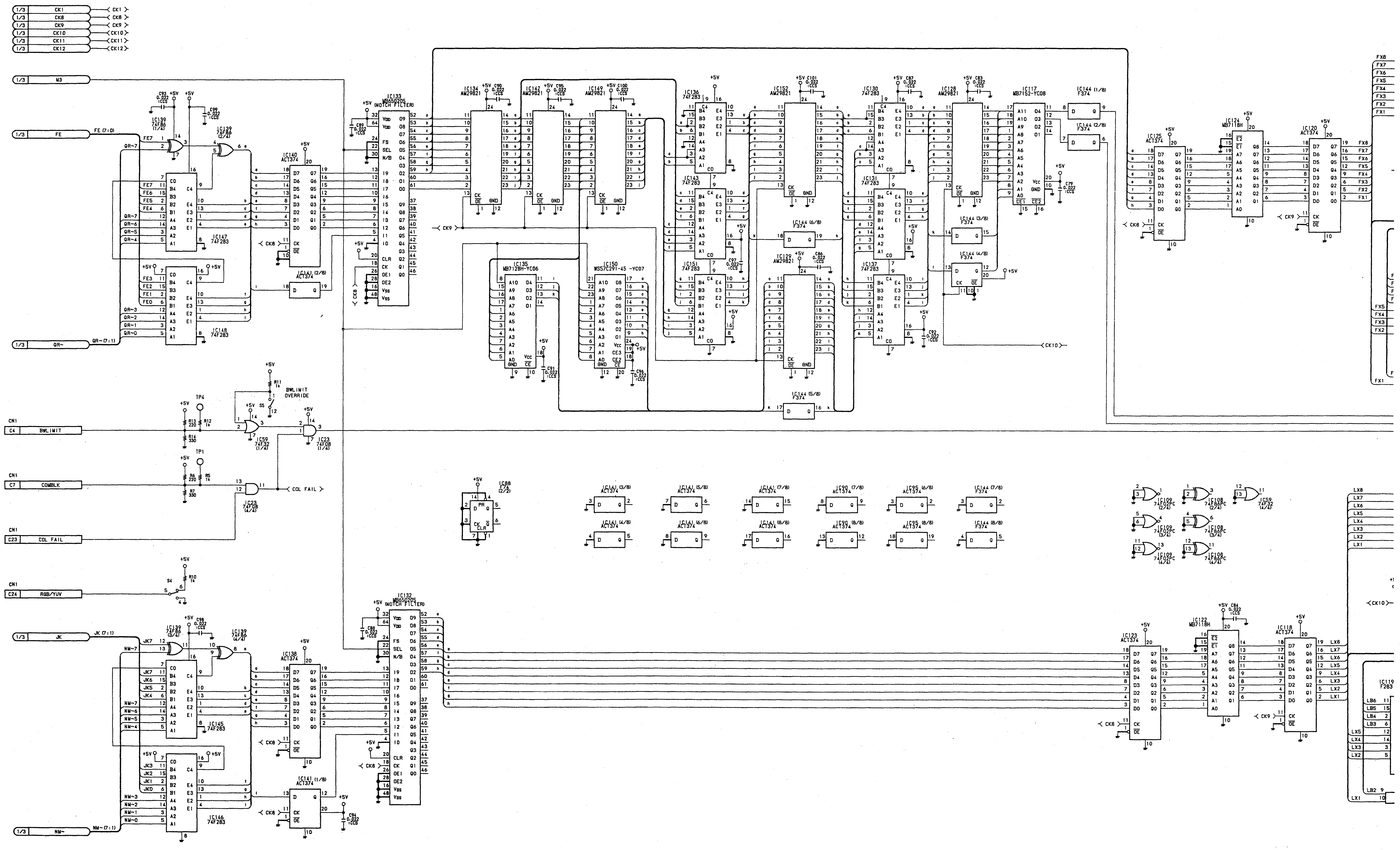

1
2
3
4
5
COMPOSITE DATA
CN1
CK13A
M0
M1
M3
HD2
NTSC
PAL
IC6 74F374
IC15 ACT374
IC7 CXK1202S
IC8 ACT374
IC16 CXK1202S
IC17 ACT374
IC26 ACT374
IC18 ACT374
IC14 74S244
IC114 74S244
IC76 74S240
IC52 CXK1206M
IC41 CXK1206M
IC33 ACT374
IC40 CXK1202S
IC32 ACT374
IC24 ACT374
IC39 CXK1202S
IC47 ACT374
IC54 CXK1202S
IC53 ACT374
IC61 CXK1202S
IC46 ACT374
IC55 ACT374
IC77 74F534
IC67 74F534
IC60 ACT374
IC48 ACT374
IC62 CXK1206M
IC38 CX23043
IC68 CX23043
IC78 CX23043
TP3
TP2
TP5
+5V
A
B
C
D
E
F
G
H


IC7 CXK1202S
IC8 ACT374
IC16 CXK1202S
IC17 ACT374
IC26 ACT374
IC18 ACT374
IC52 CXK1206M
IC41 CXK1206M
IC33 ACT374
IC40 CXK1202S
IC32 ACT374
IC24 ACT374
IC25 ACT374
IC46 ACT374
IC70 ACT374
IC77 74F534
IC67 74F534
IC58 ACT374
IC39 CXK1202S
IC47 ACT374
IC54 CXK1202S
IC53 ACT374
IC61 CXK1202S
IC66 ACT374
IC55 ACT374
IC60 ACT374
IC48 ACT374
IC62 CXK1206M
IC72 CXK1206M
IC38 CX23043
IC68 CX23043
IC78 CX23043
TP3
TP2
TP5
FE
JK
L
NM
NM ~
QR
QR ~
NTSC
PAL
+5V

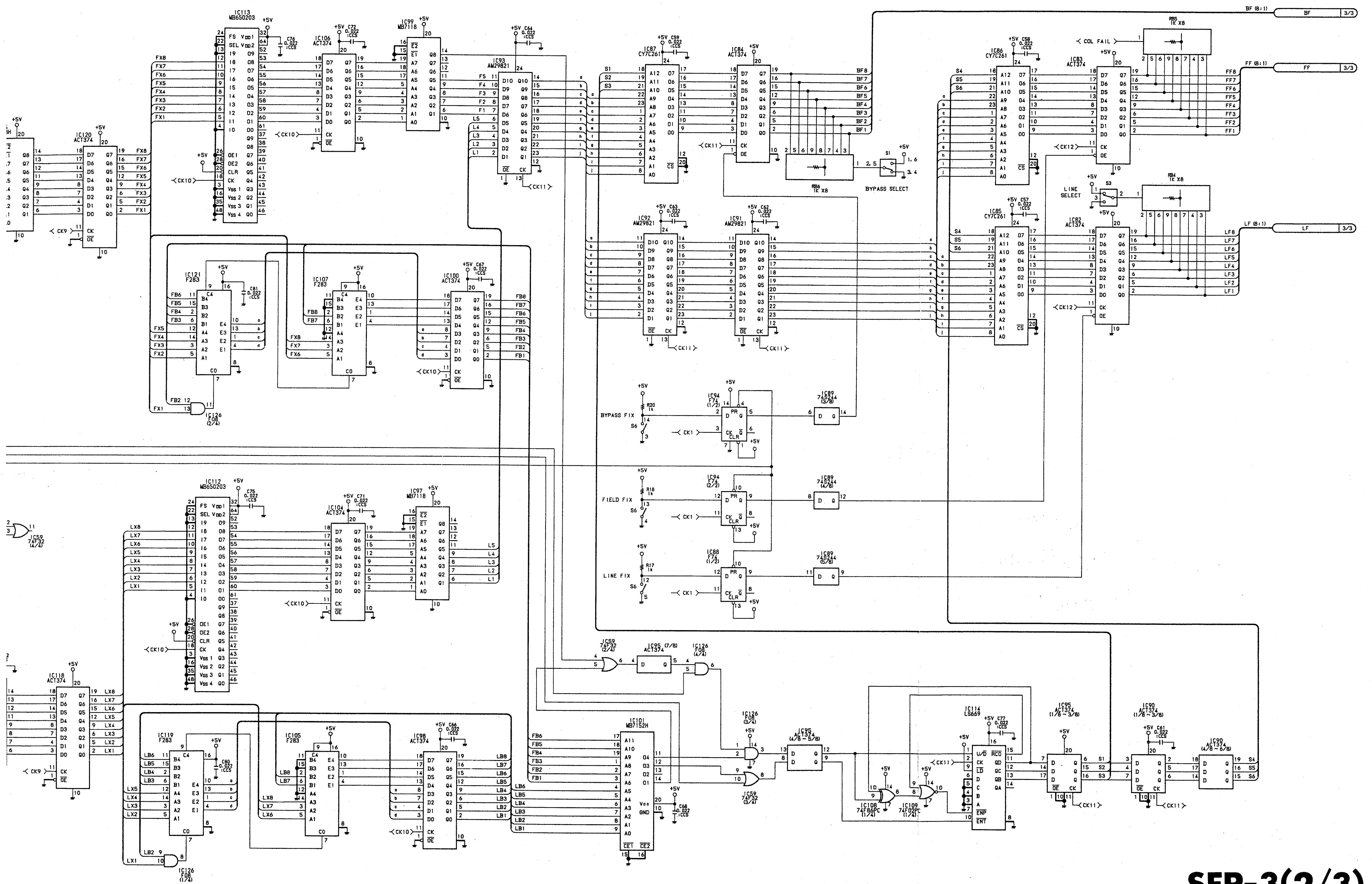
SEP-3(1/3)

1-630-355-11(1)
BVX-100/100P

SEP-3/P (2/3); Y/C SEPARATION


1
2
3
4
5
CK1
CK8
CK9
CK10
CK11
CK12
M3
FE
FE (7:0)
QR~
QR~(7:1)
IC139 74F86
IC140 ACT374
IC147 74F283
IC148 74F283
IC141 ACT374
IC133 MB652020 (NOTCH FILTER)
IC134 AM29821
IC142 AM29821
IC149 AM29821
IC135 MB7128H-YC06
IC150 WS57C291-45 -YC07
IC136 74F283
IC143 74F283
IC151 74F283
IC152 AM29821
IC129 AM29821
IC144 F374
IC130 74F283
IC131 74F283
IC137 74F283
IC128 AM29821
IC117 MB7152-YC08
IC125 ACT374
IC124 MB7118H
IC120 ACT374
FX8
FX7
FX6
FX5
FX4
FX3
FX2
FX1
CK10
C4
BWLIMIT
BWLIMIT OVERRIDE
TP4
TP1
S5
R11 1k
IC59 74F32
IC23 74F08
C7
COMBLK
COL FAIL
C23
CN1
S4
R10 1k
C24
RGB/YUV
JK
JK (7:1)
NM~
NM~(7:1)
IC145 74F283
IC146 74F283
IC138 ACT374
IC132 MB652025 (NOTCH FILTER)
IC88
IC90 ACT374
IC95 ACT374
IC109 74F86PC
IC108 74F86PC
IC123 ACT374
IC122 MB7118H
IC118 ACT374
IC119 F283
LX8
LX7
LX6
LX5
LX4
LX3
LX2
LX1
+5V

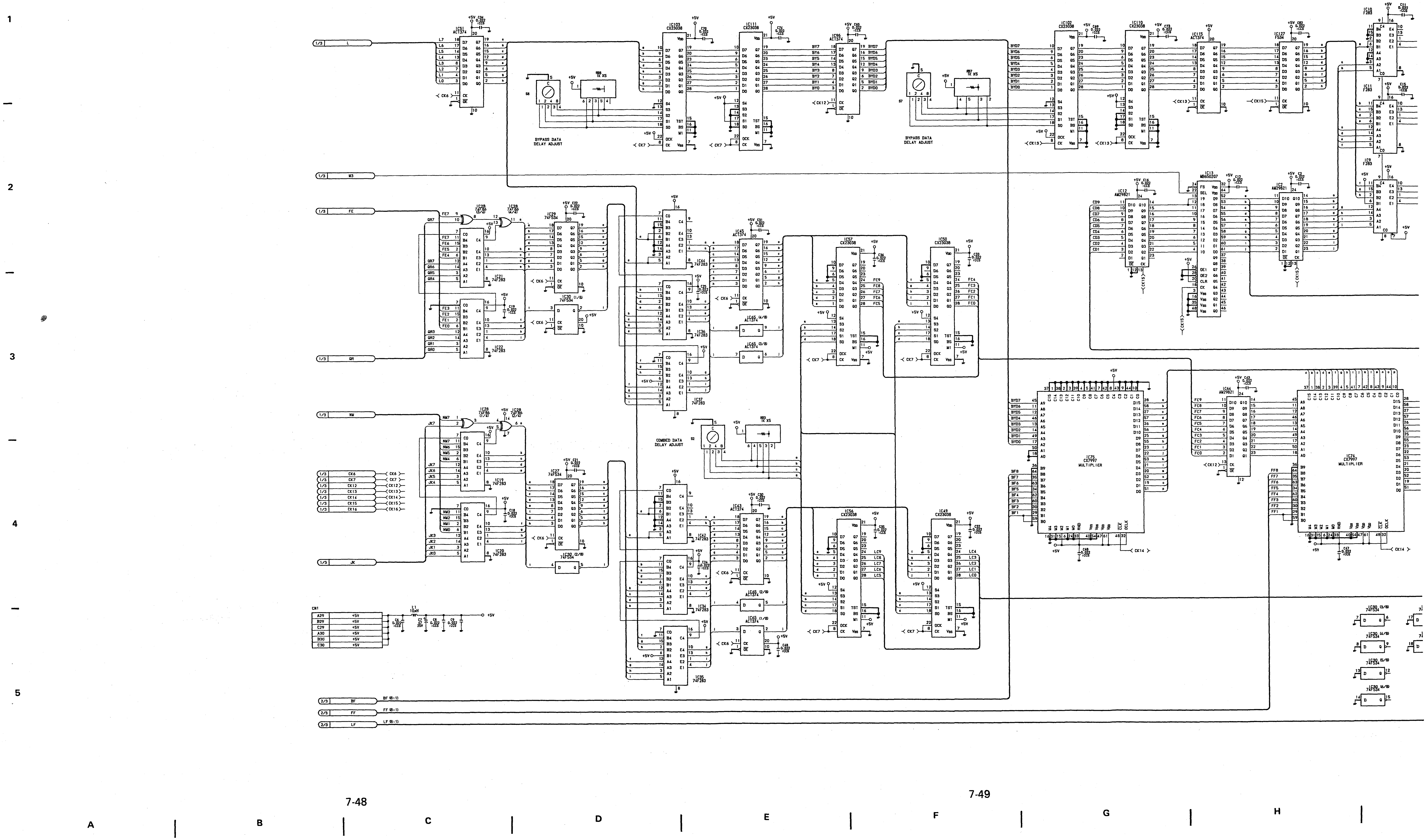
A	B	C	D	E	F	G	H

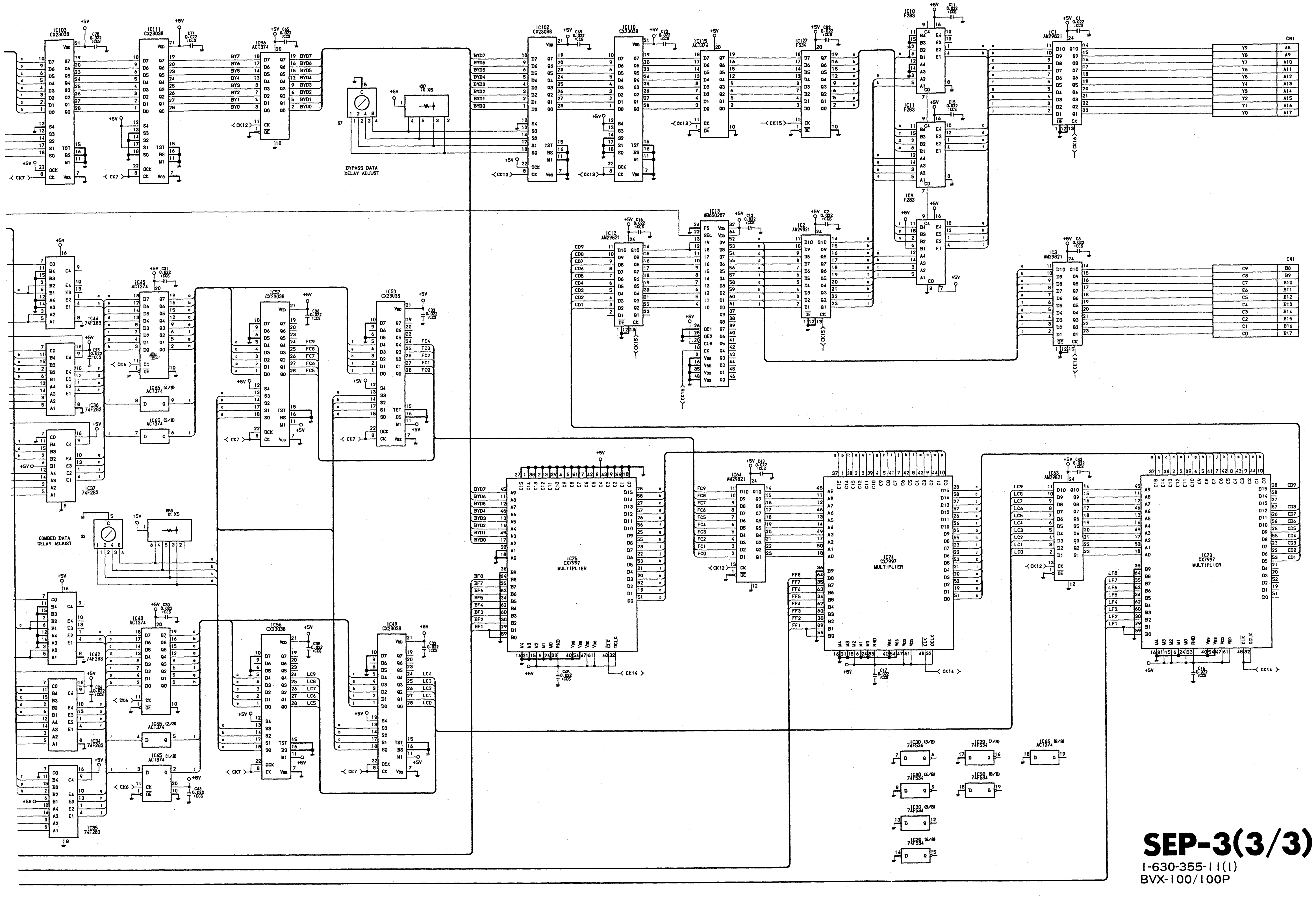

IC113 MB650203
IC106 ACT374
IC99 MB7118
IC93 AM29821
IC87 CY7C261
IC84 ACT374
IC86 CY7C261
IC83 ACT374
IC85 CY7C261
IC82 ACT374
IC120 ACT374
IC121 F283
IC107 F283
IC100 ACT374
IC92 AM29821
IC91 AM29821
IC126 F08
IC94 F74
IC89 74F244
IC88 F74
IC112 MB650203
IC104 ACT374
IC97 MB7118
IC118 ACT374
IC119 F283
IC105 F283
IC98 ACT374
IC101 MB7152H
IC59 74F32
IC95 ACT374
IC108 74F86PC
IC109 74F02PC
IC114 LS669
IC90 ACT374
RB5 1K X8
RB6 1K X8
RB4 1K X8
S1
S3
BYPASS SELECT
LINE SELECT
COL FAIL
BYPASS FIX
FIELD FIX
LINE FIX
BF (8:1)
FF (8:1)
LF (8:1)
BF
FF
LF
3/3
CK9
CK10
CK11
CK12
CK1
+5V

SEP-3(2/3)

1-630-355-11(1)
BVX-100/100P

SEP-3/P (3/3); Y/C SEPARATION

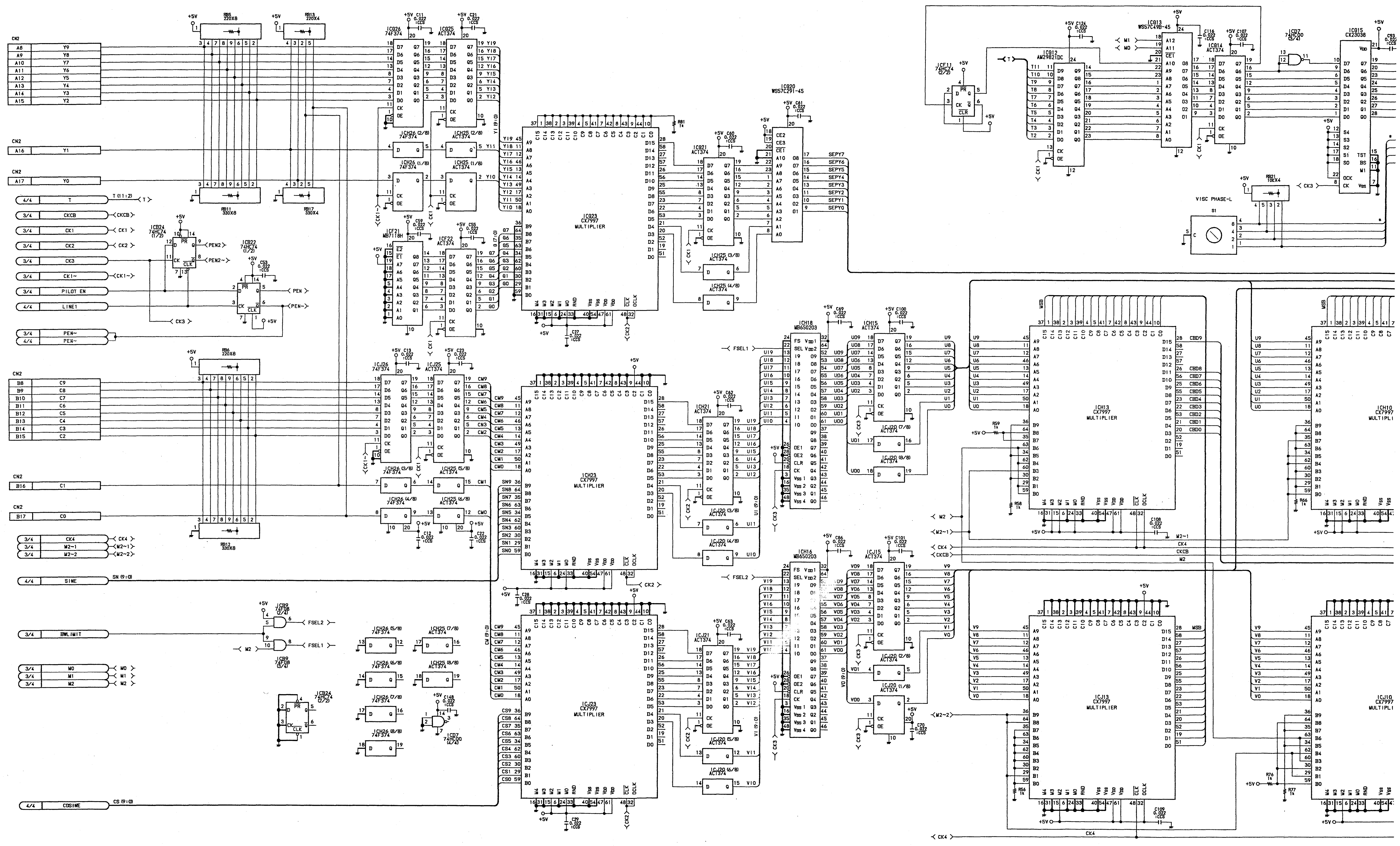

1
2
3
4
5
A
B
C
D
E
F
G
H
1/3 L
1/3 M3
1/3 FE
1/3 QR
1/3 NM
1/3 JK
1/3 CK6
1/3 CK7
1/3 CK12
1/3 CK13
1/3 CK14
1/3 CK15
1/3 CK16
2/3 BF
2/3 FF
2/3 LF
CN1
L1 10uH
+5V
IC51 ACT374
IC103 CX23038
IC111 CX23038
IC96 ACT374
IC102 CX23038
IC110 CX23038
IC115 ACT374
IC127 F534
IC10 F283
IC11 F283
IC9 F283
IC12 AM29821
IC13 MB650207
IC2 AM29821
IC57 CX23038
IC50 CX23038
IC56 CX23038
IC49 CX23038
IC75 CX7997 MULTIPLIER
IC74 CX7997 MULTIPLIER
IC64 AM29821
BYPASS DATA DELAY ADJUST
COMBINED DATA DELAY ADJUST

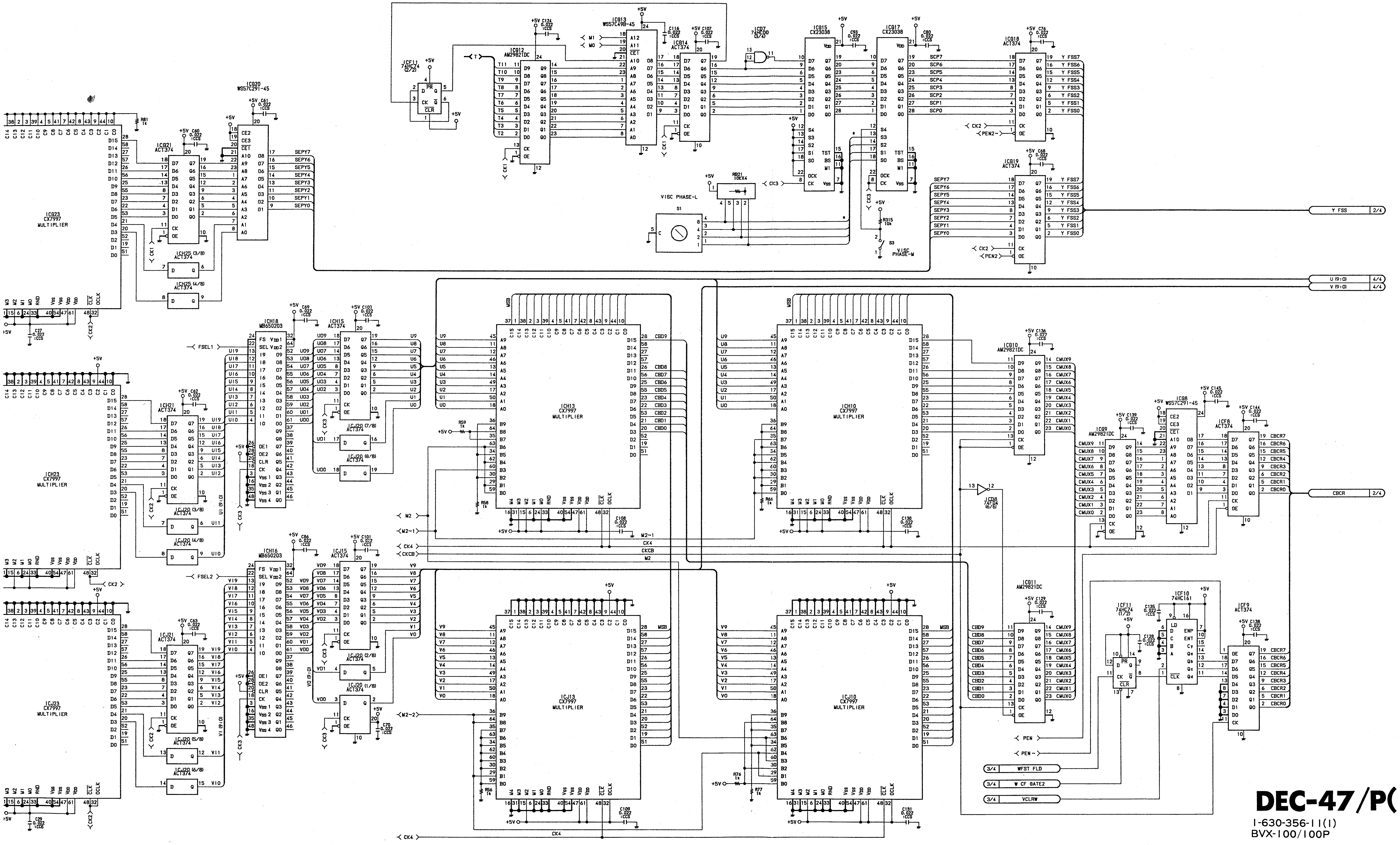

IC103 CX23038
IC111 CX23038
IC96 ACT374
BYPASS DATA DELAY ADJUST
IC102 CX23038
IC110 CX23038
IC115 ACT374
IC127 F534
IC10 F283
IC11 F283
IC9 F283
IC1 AM29821
IC3 AM29821
IC2 AM29821
IC12 AM29821
IC13 MB650207
CN1
IC45 ACT374
IC44 74F283
IC36 74F283
IC37 74F283
IC57 CX23038
IC50 CX23038
COMBED DATA DELAY ADJUST
IC43 ACT374
IC42 74F283
IC34 74F283
IC35 74F283
IC56 CX23038
IC49 CX23038
IC75 CX7997 MULTIPLIER
IC64 AM29821
IC74 CX7997 MULTIPLIER
IC63 AM29821
IC73 CX7997 MULTIPLIER
IC30 74F534
IC65 ACT374
+5V
CK7
CK12
CK13
CK14
CK15
CK6

SEP-3(3/3)

1-630-355-11(1)
BVX-100/100P

DEC-47/P (1/4) ; DEMODURATION

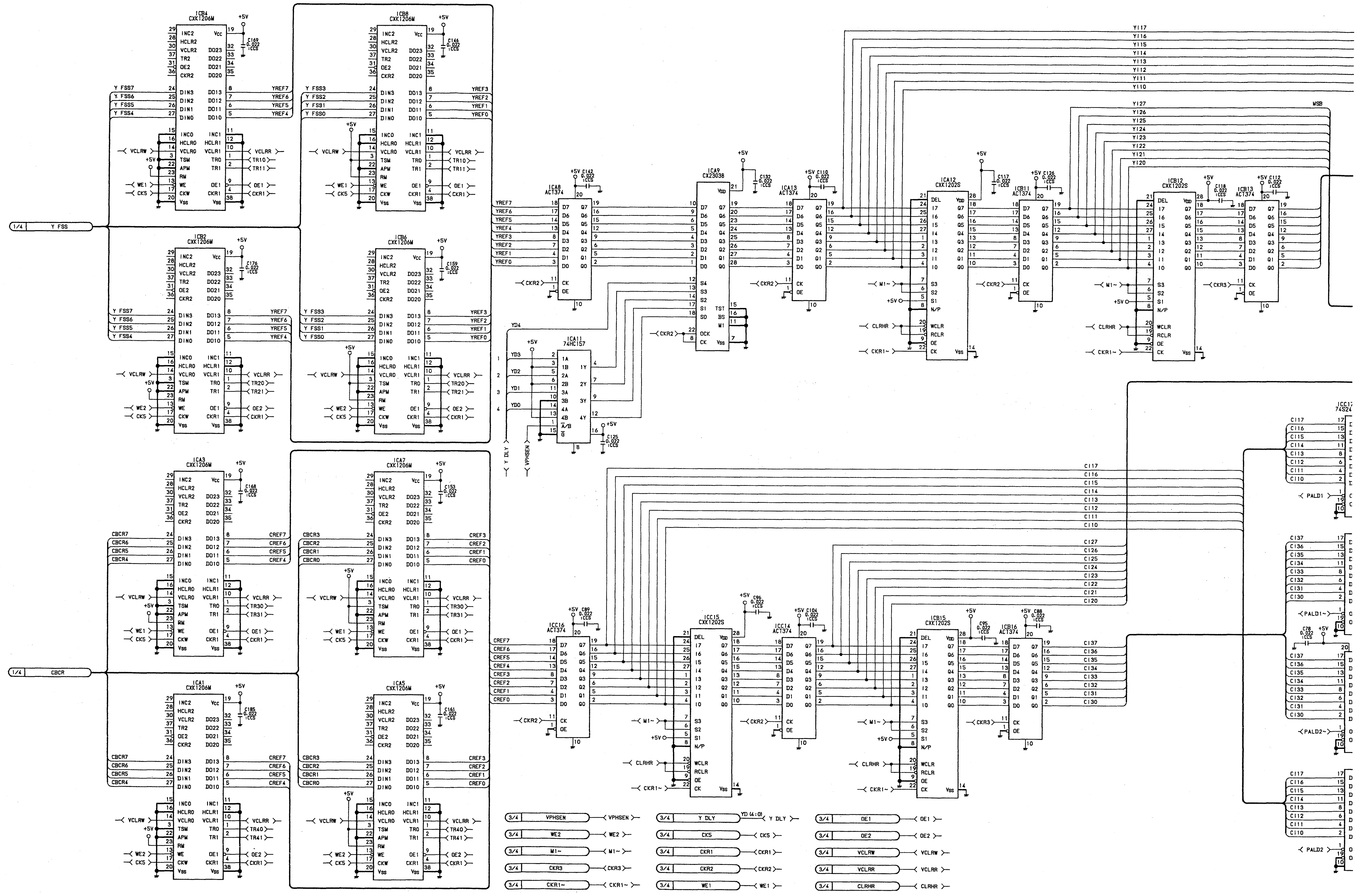

CN2
A8
A9
A10
A11
A12
A13
A14
A15
A16
A17
Y9
Y8
Y7
Y6
Y5
Y4
Y3
Y2
Y1
Y0
T
CKCB
CK1
CK2
CK3
CK1~
PILOT EN
LINE1
PEN~
B8
B9
B10
B11
B12
B13
B14
B15
B16
B17
C9
C8
C7
C6
C5
C4
C3
C2
C1
C0
CK4
M2~1
M2~2
SINE
BWLIMIT
M0
M1
M2
COSINE
RB5 220X8
RB13 220X4
RB11 330X8
RB17 330X4
RB6 220X8
RB12 330X8
ICB24 74HC74 (1/2)
ICB22 74HC74 (1/2)
ICG26 74F374
ICG25 ACT374
ICF21 MB7118H
ICF22 ACT374
ICJ26 74F374
ICJ25 ACT374
ICG23 CX7997 MULTIPLIER
ICH23 CX7997 MULTIPLIER
ICJ23 CX7997 MULTIPLIER
ICG21 ACT374
ICG20 WS57C291-45
ICH21 ACT374
ICJ21 ACT374
ICH18 MB650203
ICH16 MB650203
ICH15 ACT374
ICJ15 ACT374
ICH20 ACT374
ICJ20 ACT374
ICH13 CX7997 MULTIPLIER
ICJ13 CX7997 MULTIPLIER
ICH10 CX7997 MULTIPLI
ICJ10 CX7997 MULTIPLI
ICF11 74HC74 (2/2)
ICG12 AM29821DC
ICG13 WS57C49B-45
ICG14 ACT374
ICG7 74HC00 (3/4)
ICG15 CX23038
ICB9 74F08 (2/4)
ICB9 74F08 (3/4)
ICB24 74HC74 (2/2)
ICD7 74HC00 (4/4)
VISC PHASE-L
S1
RB21 10KX4
SEPY7
SEPY6
SEPY5
SEPY4
SEPY3
SEPY2
SEPY1
SEPY0
FSEL1
FSEL2
PEN
PEN2
+5V
0.022

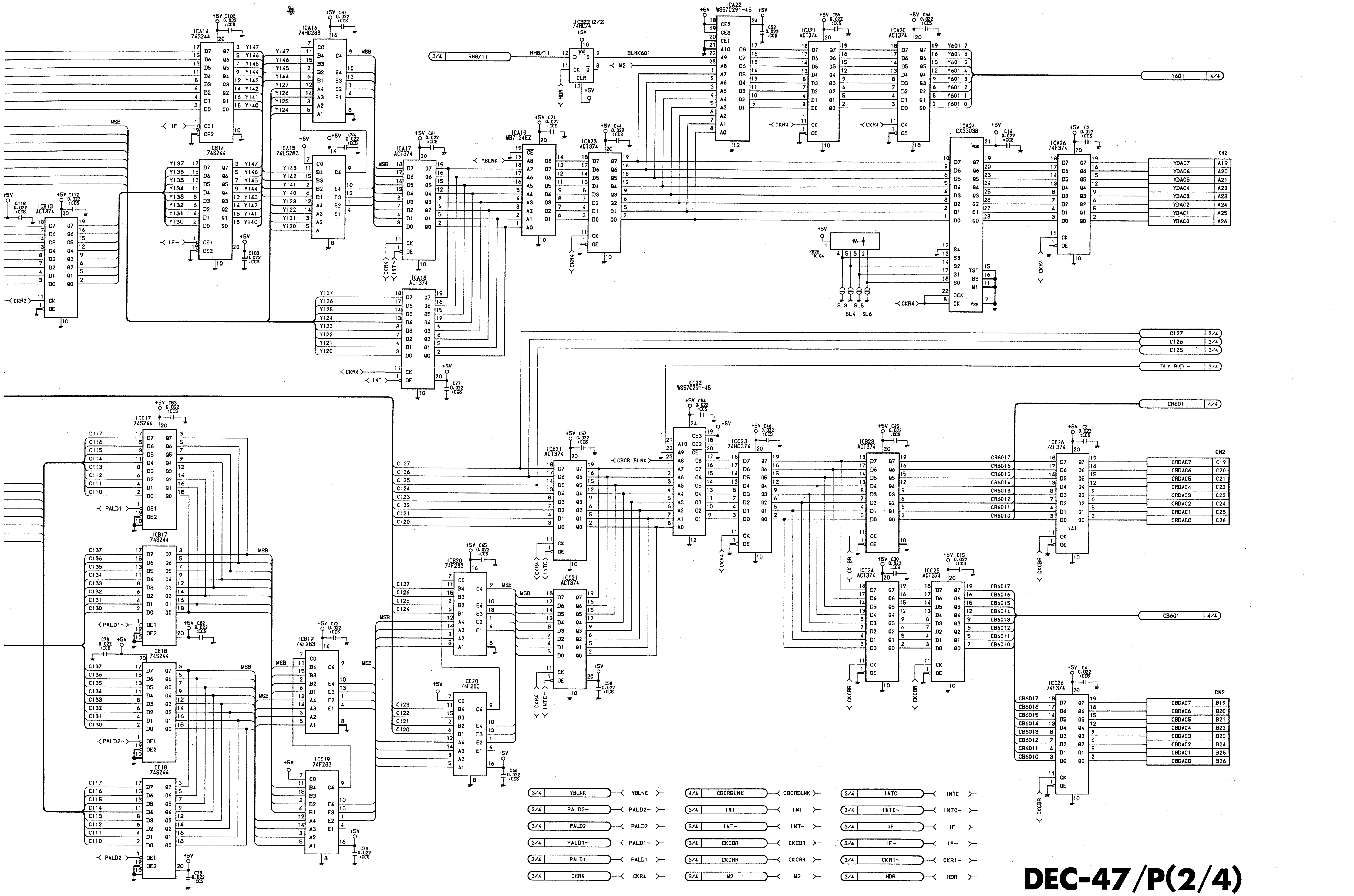

IC023 CX7997 MULTIPLIER
IC021 ACT374
IC020 WS57C291-45
IC025 ACT374
ICF11 74HC74
IC012 AM29821DC
IC013 WS57C49B-45
IC014 ACT374
IC007 74HC00
IC015 CX23038
IC017 CX23038
IC018 ACT374
IC019 ACT374
RB21 10K×4
VISC PHASE-L
VISC PHASE-M
S1
S3
Y FSS
U (9:0)
V (9:0)
ICH23 CX7997 MULTIPLIER
ICH21 ACT374
ICH18 MB650203
ICH15 ACT374
ICH13 CX7997 MULTIPLIER
ICH10 CX7997 MULTIPLIER
IC010 AM29821DC
IC09 AM29821DC
IC08 WS57C291-45
ICF8 ACT374
CBCR
ICJ23 CX7997 MULTIPLIER
ICJ21 ACT374
ICJ16 MB650203
ICJ15 ACT374
ICJ20 ACT374
ICJ13 CX7997 MULTIPLIER
ICJ10 CX7997 MULTIPLIER
IC011 AM29821DC
ICF10 74HC161
ICF9 ACT374
ICD8 74F04
FSEL1
FSEL2
M2
M2~1
M2~2
CK2
CK3
CK4
CKCB
PEN
PEN~
PEN2~
WFST FLD
W CF GATE2
VCLRW
+5V
2/4
3/4
4/4

DEC-47/P(1/4)

1-630-356-11(1)
BVX-100/100P

DEC-47/P (2/4); DEMODURATION


1/4 Y FSS
1/4 CBCR
ICB4 CXK1206M
ICB8 CXK1206M
ICB2 CXK1206M
ICB6 CXK1206M
ICA3 CXK1206M
ICA7 CXK1206M
ICA1 CXK1206M
ICA5 CXK1206M
ICA8 ACT374
ICA9 CX23038
ICA11 74HC157
ICA13 ACT374
ICA12 CXK1202S
ICB11 ACT374
ICB12 CXK1202S
ICB13 ACT374
ICC16 ACT374
ICC15 CXK1202S
ICC14 ACT374
ICB15 CXK1202S
ICB16 ACT374
Y DLY
VPHSEN
3/4 VPHSEN
3/4 WE2
3/4 M1~
3/4 CKR3
3/4 CKR1~
3/4 Y DLY
3/4 CK5
3/4 CKR1
3/4 CKR2
3/4 WE1
3/4 OE1
3/4 OE2
3/4 VCLRW
3/4 VCLRR
3/4 CLRHR
YD (4:0)
MSB
PALD1
PALD2
+5V

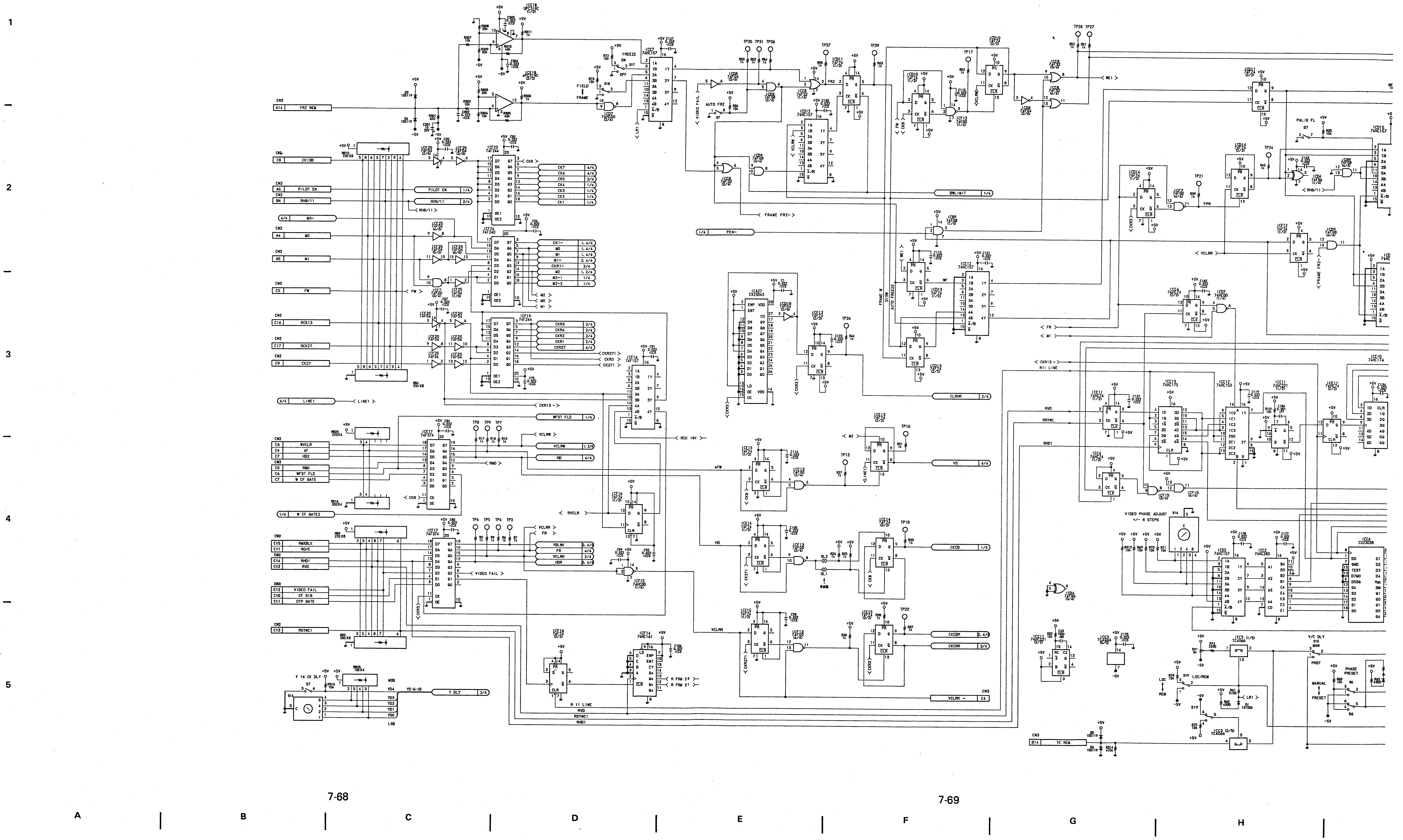


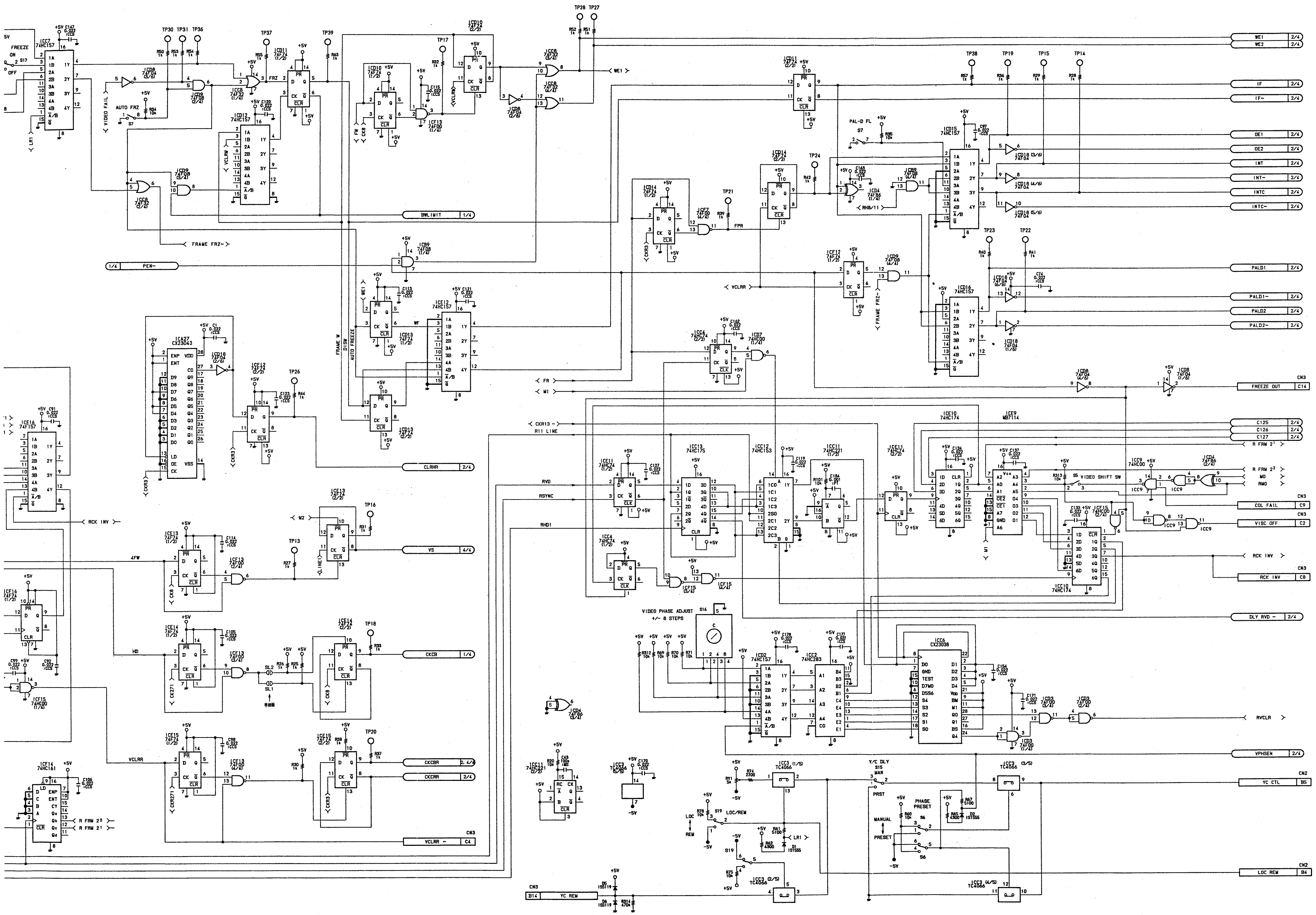
ICA14 74S244
ICB14 74S244
ICB13 ACT374
ICA16 74HC283
ICA15 74LS283
ICA17 ACT374
ICA18 ACT374
ICA19 MB7124EZ
ICB22 (2/2) 74HC74
ICA23 ACT374
ICA22 WS57C291-45
ICA21 ACT374
ICA20 ACT374
ICA24 CX23038
ICA26 74F374
ICC17 74S244
ICB17 74S244
ICB18 74S244
ICC18 74S244
ICB19 74F283
ICC19 74F283
ICB20 74F283
ICC20 74F283
ICB21 ACT374
ICC21 ACT374
ICC22 WS57C291-45
ICC23 74HC374
ICB23 ACT374
ICC24 ACT374
ICC25 ACT374
ICB26 74F374
ICC26 74F374
RB26 1K X4
SL3 SL4 SL5 SL6
RH8/11
BLNK601
Y601
C127 C126 C125
DLY RVD ~
CR601
CB601
YDAC7 YDAC6 YDAC5 YDAC4 YDAC3 YDAC2 YDAC1 YDAC0
CRDAC7 CRDAC6 CRDAC5 CRDAC4 CRDAC3 CRDAC2 CRDAC1 CRDAC0
CBDAC7 CBDAC6 CBDAC5 CBDAC4 CBDAC3 CBDAC2 CBDAC1 CBDAC0
CN2
YBLNK
PALD2~
PALD2
PALD1~
PALD1
CKR4
CBCRBLNK
INT
INT~
CKCBR
CKCRR
M2
INTC
INTC~
IF
IF~
CKR1~
HDR
3/4
4/4
+5V
MSB

DEC-47/P(2/4)

1-630-356-11(1)
BVX-100/100P

DEC-47/P (3/4); DEMODURATION

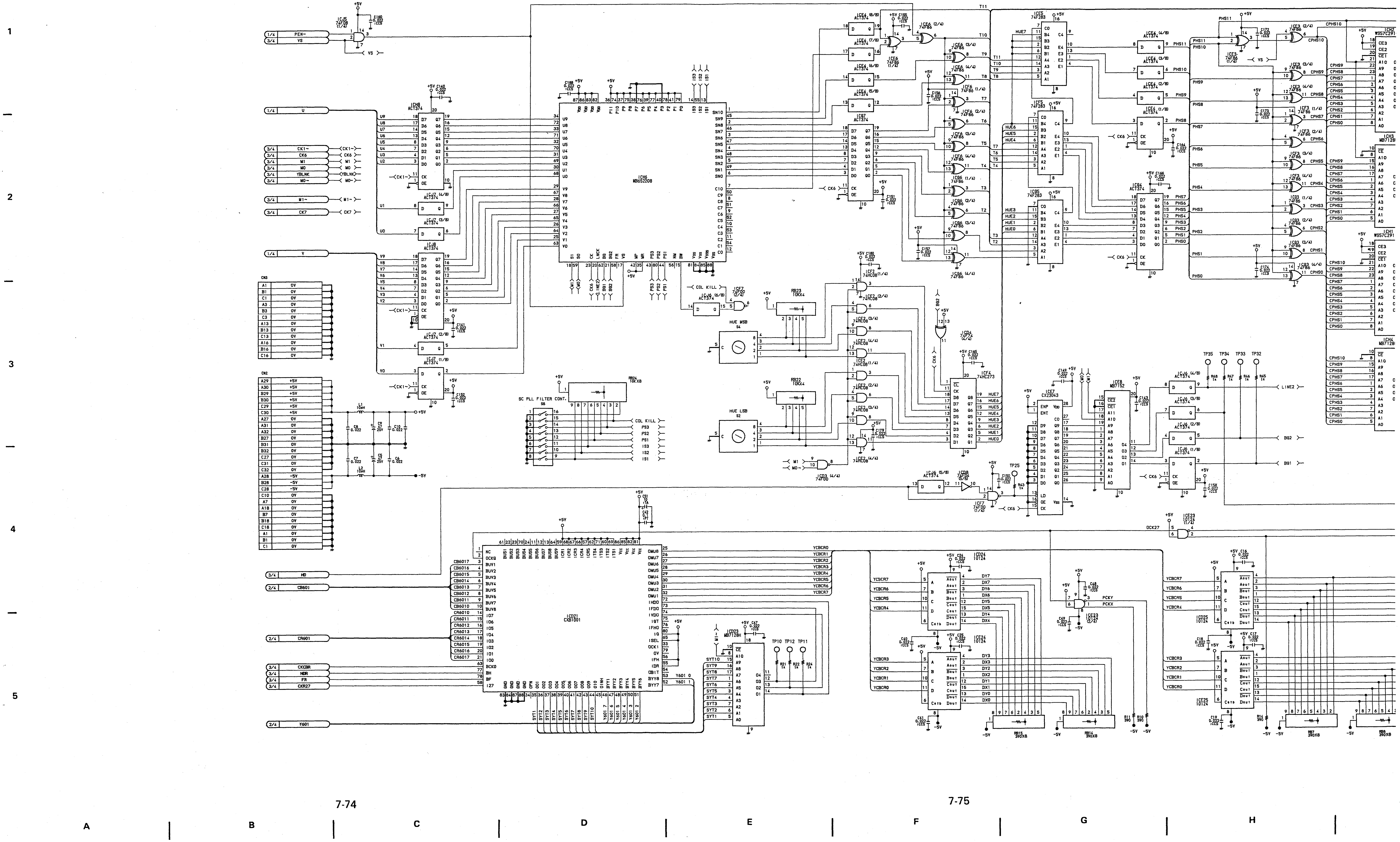

1
2
3
4
5
A
B
C
D
E
F
G
H
FRZ REM
CK13B
PILOT EN
RH8/11
MO
M1
FW
RCK13
RCK27
CK27
LINE1
WVCLR
4F
HD2
RWO
WFST FLD
W CF GATE
RWOBLK
RO/E
RHD1
RVD
VIDEO FAIL
CF S16
CFP GATE
RSYNC1
Y 16 CK DLY
Y DLY
FREEZE
FIELD
FRAME
AUTO FRZ
WE1
FPR
VCLRR
PEN-
BWLIMIT
FRAME FRZ-
CLRHR
VS
CKCB
CKCBR
CKCRR
VCLRR -
R 11 LINE
RSYNC1
VIDEO PHASE ADJUST
+/- 8 STEPS
PAL-D FL
LOC/REM
Y/C DLY
PHASE PRESET
MANUAL
PRESET
YC REM

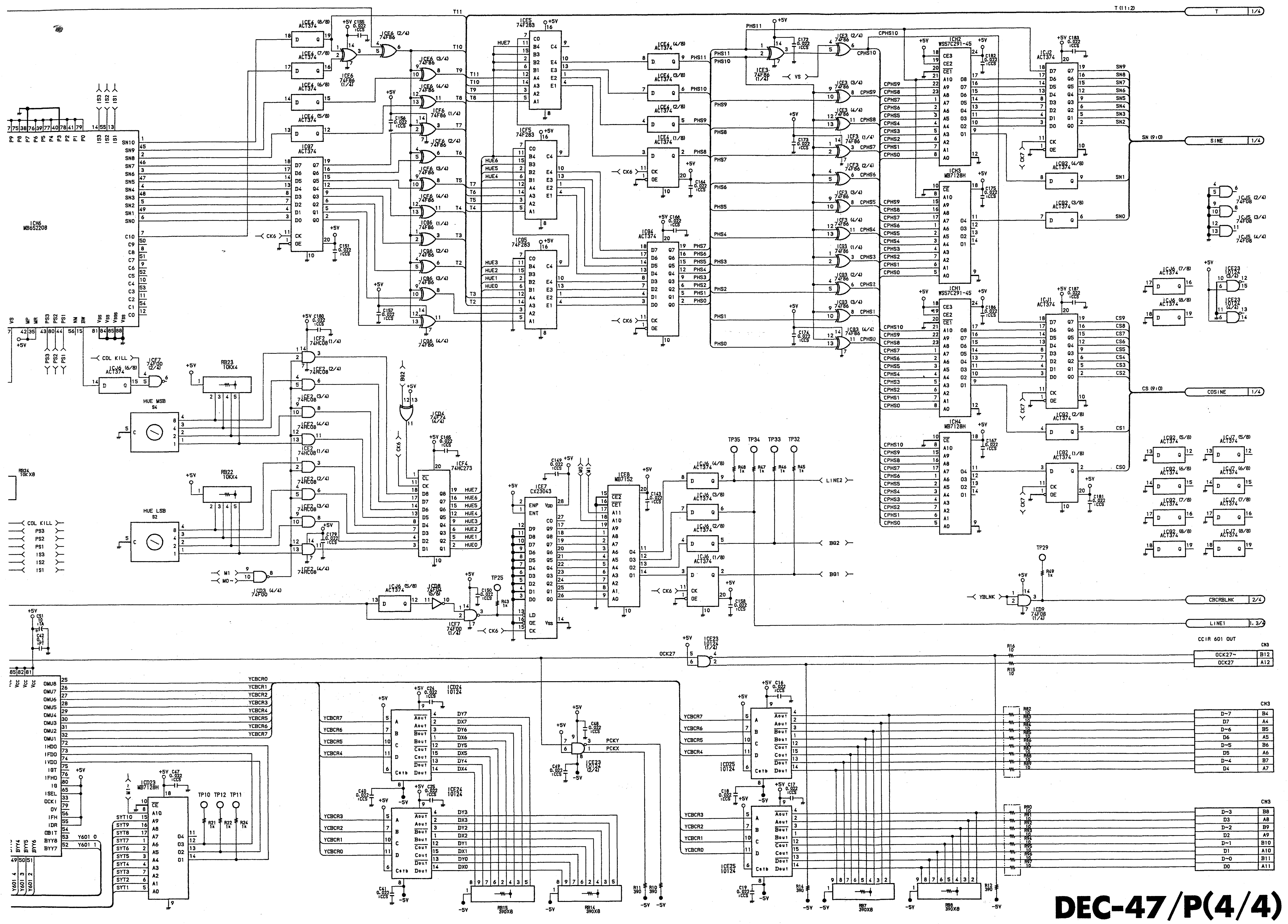

FREEZE
ON
OFF
S17
VIDEO FAIL
AUTO FR2
S7
LR1
WE1
WE2
IF
IF-
OE1
OE2
INT
INT-
INTC
INTC-
PAL-D FL
PALD1
PALD1-
PALD2
PALD2-
FREEZE OUT
CN3
C14
BWLIMIT
FRAME FRZ-
PEN-
VCLRR
FR
M1
CKCR13
R11 LINE
C125
C126
C127
R FRM 2
MO
RMO
COL FAIL
C9
VISC OFF
C2
RCK INV
C8
VIDEO SHIFT SW
DLY RVD -
CLRHR
VS
M2
4FW
HD
CKCB
CKCBR
CKCRR
VCLRR -
C4
RCK INV
R FRM 2²
R FRM 2¹
RVD
RSYNC
RHD1
VIDEO PHASE ADJUST
+/- 8 STEPS
S16
RVCLR
VPHSEN
Y/C DLY
S15
MAN
PRST
PHASE PRESET
MANUAL
PRESET
S6
YC CTL
CN2
B5
LOC
REM
S19
LOC/REM
LR1
LOC REM
B4
YC REM
B14
CX23043
CX23038
MB7114
74HC157
74HC174
74HC175
74HC153
74HC221
74HC283
74HC161
TC4066
74F74
74F00
74F08
74F04
74F32
74F86

DEC-47/P(3/4)

1-630-356-11(1)
BVX-100/100P

DEC-47/P (4/4) ; DEMODURATION

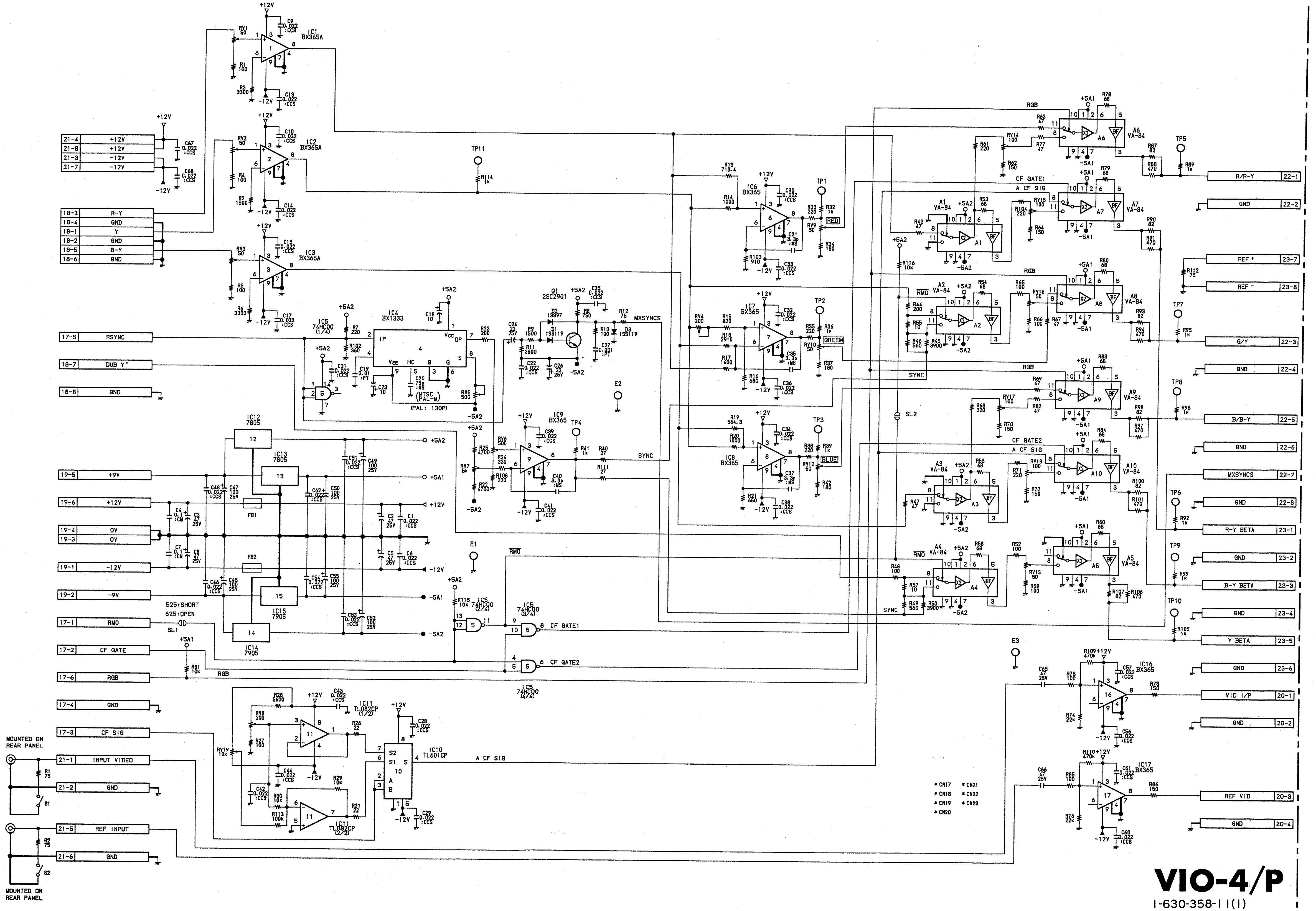

1
2
3
4
5
A
B
C
D
E
F
G
H
PEN~
VS
U
CK1~
CK6
M1
M0
YBLNK
M0~
M1~
CK7
Y
HD
CB601
CR601
CKCBR
HDR
FR
CKR27
Y601
ICJ5 74F08
ICH8 ACT374
ICJ7 ACT374
ICJ8 ACT374
ICH6 MB652208
ICE7 74F00
ICF3 74HC08
RB23 10KX4
RB22 10KX4
HUE MSB
HUE LSB
S4
S2
SC PLL FILTER CONT.
S6
RB24 10KX8
COL KILL
PS3
PS2
PS1
IS3
IS2
IS1
ICF4 74HC273
ICE5 74F283
ICD5 74F283
ICE4 ACT374
ICD4 ACT374
ICE6 74F86
ICD6 74F86
ICE3 74F86
ICD3 74F86
ICD7 ACT374
ICE7 CX23043
ICE8 MB7152
ICJ6 ACT374
ICH2 MB7128H
ICH3 MB7128H
ICH1 MB7128H
ICH4 MB7128H
ICE23 10124
ICD21 CXB1001
ICD23 MB7128H
ICD24 10124
ICE24 10124
ICD25 10124
ICE25 10124
RB15 390X8
RB14 390X8
RB7 390X8
RB8 390X8
TP35
TP34
TP33
TP32
TP25
TP10
TP12
TP11
LINE2
BG2
BG1
OCK27
PCKY
PCKX
+5V
-5V
L1 10μH
L2 10μH


T(11:2)
T 1/4
SN(9:0)
SINE 1/4
CS(9:0)
COSINE 1/4
CBCRBLNK 2/4
LINE1 1,3/4
CCIR 601 OUT
CN3
OCK27~
OCK27
YCBCR0
YCBCR1
YCBCR2
YCBCR3
YCBCR4
YCBCR5
YCBCR6
YCBCR7
IC46 MB652208
IC77 74F00
IC23 MB7128H
IC25 10124
IC24 10124
IC35 74F283
ICF5 74F283
ICG5 74F283
IC57 CX23043
IC58 MB7152
ICH2 MS57C291-45
ICH3 MB7128H
ICH1 MS57C291-45
ICH4 MB7128H
IC44 74HC273
HUE MSB
HUE LSB
RB23 10K×4
RB22 10K×4
COL KILL
LINE2
BG2
BG1
YBLNK
TP35 TP34 TP33 TP32
TP25
TP29
TP10 TP12 TP11
PCKY
PCKX
RB15 390×8
RB14 390×8
RB7 390×8
RB8 390×8
PHS11 PHS10 PHS9 PHS8 PHS7 PHS6 PHS5 PHS4 PHS3 PHS2 PHS1 PHS0
CPHS10 CPHS9 CPHS8 CPHS7 CPHS6 CPHS5 CPHS4 CPHS3 CPHS2 CPHS1 CPHS0
HUE7 HUE6 HUE5 HUE4 HUE3 HUE2 HUE1 HUE0
SN9 SN8 SN7 SN6 SN5 SN4 SN3 SN2 SN1 SN0
CS9 CS8 CS7 CS6 CS5 CS4 CS3 CS2 CS1 CS0
DY7 DY6 DY5 DY4 DY3 DY2 DY1 DY0
DX7 DX6 DX5 DX4 DX3 DX2 DX1 DX0
D-7 D7 D-6 D6 D-5 D5 D-4 D4
D-3 D3 D-2 D2 D-1 D1 D-0 D0
B12 A12
B4 A4 B5 A5 B6 A6 B7 A7
B8 A8 B9 A9 B10 A10 B11 A11

DEC-47/P(4/4)

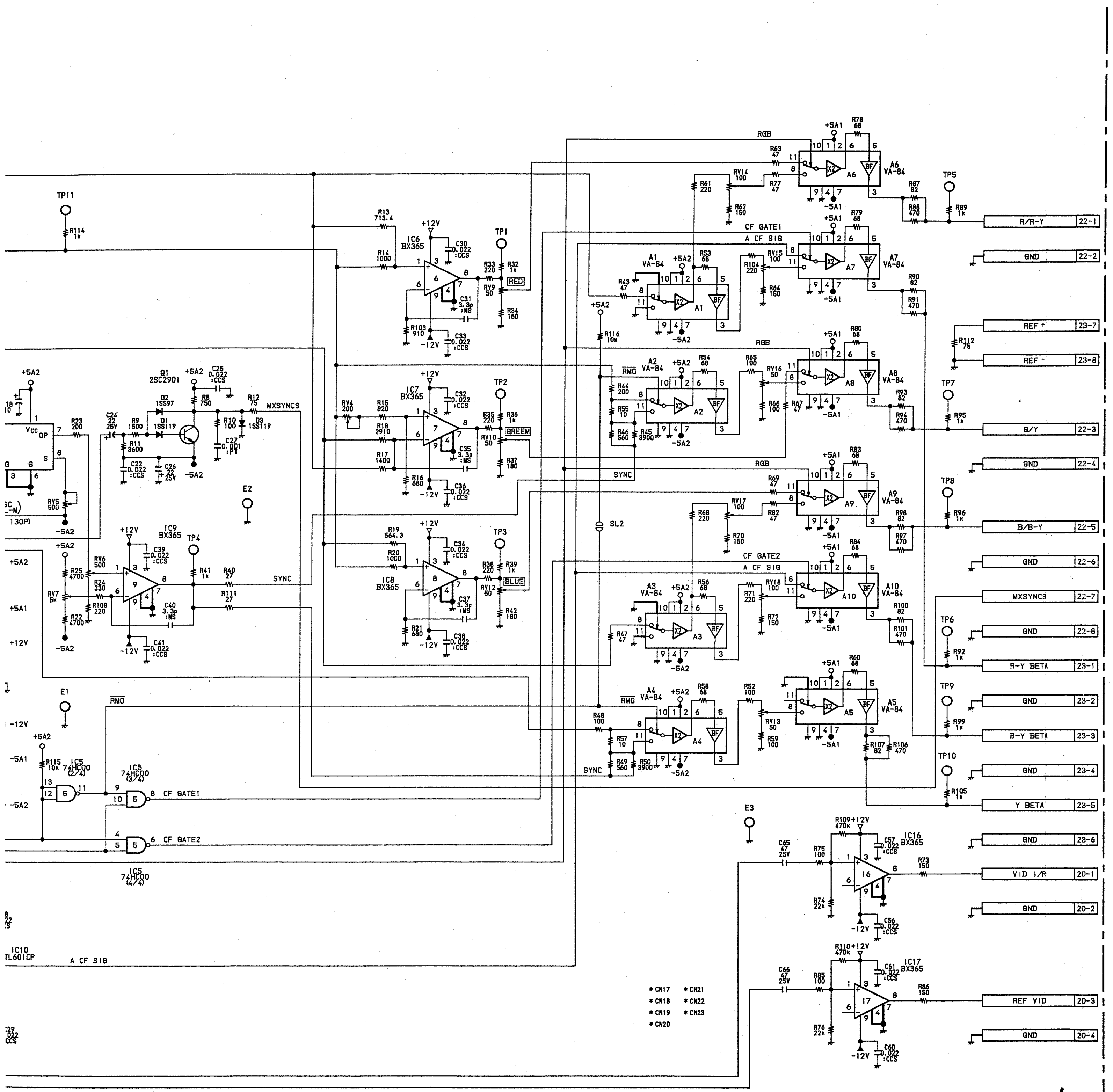
1-630-356-11(1)
BVX-100/100P

VIO-14/P ; ANALOGUE INPUT/OUTPUT
VA-84


21-4 +12V
21-8 +12V
21-3 -12V
21-7 -12V
18-3 R-Y
18-4 GND
18-1 Y
18-2 GND
18-5 B-Y
18-6 GND
17-5 RSYNC
18-7 DUB Y*
18-8 GND
19-5 +9V
19-6 +12V
19-4 0V
19-3 0V
19-1 -12V
19-2 -9V
17-1 RMO
17-2 CF GATE
17-6 RGB
17-4 GND
17-3 CF SIG
21-1 INPUT VIDEO
21-2 GND
21-5 REF INPUT
21-6 GND
MOUNTED ON REAR PANEL
IC1 BX365A
IC2 BX365A
IC3 BX365A
IC4 BX1333
IC5 74HC00
IC6 BX365
IC7 BX365
IC8 BX365
IC9 BX365
IC10 TL601CP
IC11 TL082CP
IC12 7805
IC13 7805
IC14 7905
IC15 7905
IC16 BX365
IC17 BX365
Q1 2SC2901
525:SHORT
625:OPEN
SL1
SL2
(NTSC: 75P)
(PAL: 130P)
MXSYNCS
SYNC
CF GATE1
CF GATE2
A CF SIG
RGB
RMO
RED
GREEN
BLUE
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
E1
E2
E3
A1 VA-84
A2 VA-84
A3 VA-84
A4 VA-84
A5 VA-84
A6 VA-84
A7 VA-84
A8 VA-84
A9 VA-84
A10 VA-84
+5A1
+5A2
-5A1
-5A2
R/R-Y 22-1
GND 22-2
REF + 23-7
REF - 23-8
G/Y 22-3
GND 22-4
B/B-Y 22-5
GND 22-6
MXSYNCS 22-7
GND 22-8
R-Y BETA 23-1
GND 23-2
B-Y BETA 23-3
GND 23-4
Y BETA 23-5
GND 23-6
VID I/P 20-1
GND 20-2
REF VID 20-3
GND 20-4
*CN17 *CN21
*CN18 *CN22
*CN19 *CN23
*CN20
1
2
3
4
5
A
B
C
D
E
F
G
H

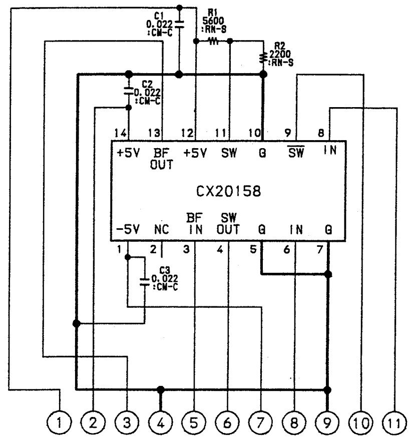
VIO-4/P

1-630-358-11(1)
BVX-100/100P


RGB
A CF SIG
CF GATE1
CF GATE2
SYNC
MXSYNCS
RMO
IC6 BX365
IC7 BX365
IC8 BX365
IC9 BX365
IC16 BX365
IC17 BX365
IC5 74HC00
IC10 TL601CP
Q1 2SC2901
A1 VA-84
A2 VA-84
A3 VA-84
A4 VA-84
A5 VA-84
A6 VA-84
A7 VA-84
A8 VA-84
A9 VA-84
A10 VA-84
TP1
TP2
TP3
TP4
TP5
TP6
TP7
TP8
TP9
TP10
TP11
E1
E2
E3
SL2
RED
GREEN
BLUE
R/R-Y 22-1
GND 22-2
REF+ 23-7
REF- 23-8
G/Y 22-3
GND 22-4
B/B-Y 22-5
GND 22-6
MXSYNCS 22-7
GND 22-8
R-Y BETA 23-1
GND 23-2
B-Y BETA 23-3
GND 23-4
Y BETA 23-5
GND 23-6
VID I/P 20-1
GND 20-2
REF VID 20-3
GND 20-4
*CN17 *CN21
*CN18 *CN22
*CN19 *CN23
*CN20
+5A1
+5A2
-5A1
-5A2
+12V
-12V

VIO-4/P

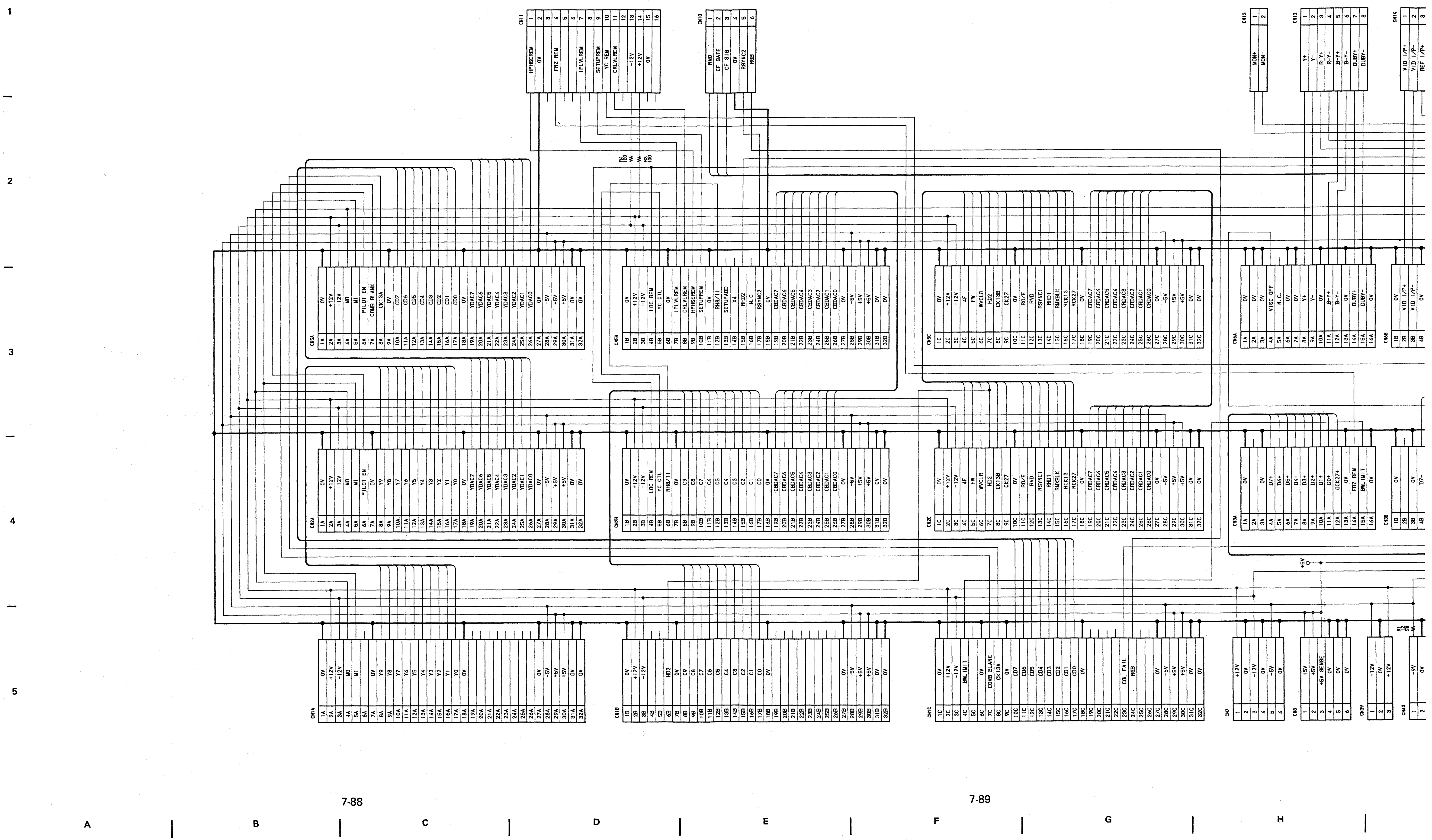
1-630-358-11(1)
BVX-100/100P

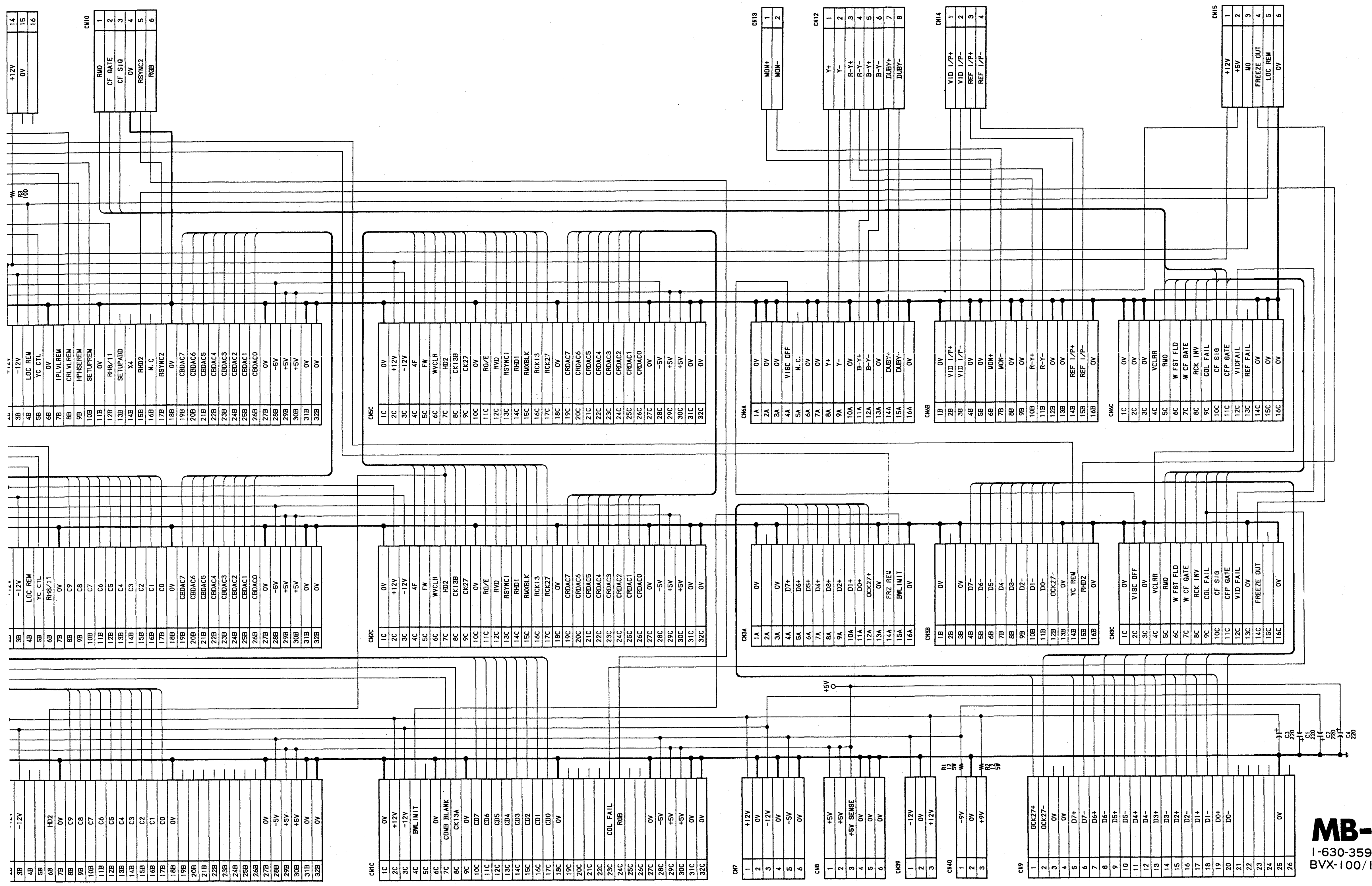

CX20158
+5V
BF OUT
+5V
SW
G
SW
IN
-5V
NC
BF IN
SW OUT
G
IN
G
C1 0.022 :CM-C
R1 5600 :RN-S
R2 2200 :RN-S
C2 0.022 :CM-C
C3 0.022 :CM-C
14 13 12 11 10 9 8
1 2 3 4 5 6 7
① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪

VA-84

1-630-354-11(1)
BVX-100/100P

MB-236; MOTHER BOARD

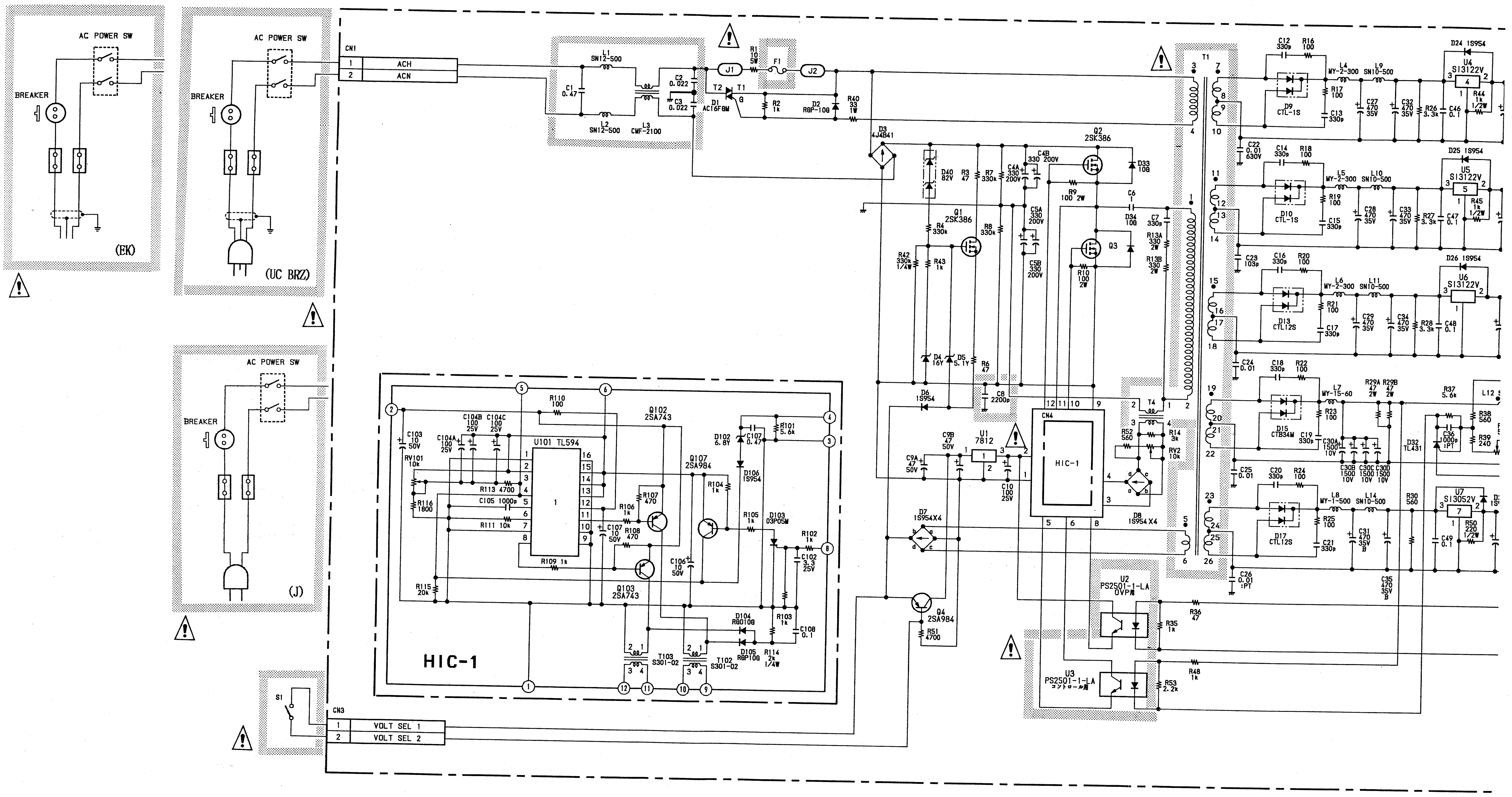

CN11
HPHSEREM
0V
FRZ REM
IPLVLREM
SETUPREM
YC REM
CRLVLREM
-12V
+12V
0V
CN10
RMD
CF GATE
CF SIG
0V
RSYNC2
RGB
CN13
MON+
MON-
CN12
Y+
Y-
R-Y+
R-Y-
B-Y+
B-Y-
DUBY+
DUBY-
CN14
VID I/P+
VID I/P+
REF I/P+
CN5A
CN5B
CN5C
CN6A
CN6B
CN2A
CN2B
CN2C
CN3A
CN3B
CN1A
CN1B
CN1C
CN7
CN8
CN39
CN40
+5V
R4 100
R3 100
R1
1
2
3
4
5
A
B
C
D
E
F
G
H


CN10
RWO
CF GATE
CF SIG
0V
RSYNC2
RGB
+12V
0V
CN13
MON+
MON-
CN12
Y+
Y-
R-Y+
R-Y-
B-Y+
B-Y-
DUBY+
DUBY-
CN14
VID I/P+
VID I/P-
REF I/P+
REF I/P-
CN15
+12V
+5V
WO
FREEZE OUT
LOC REM
0V
CN5C
CN4A
CN4B
CN4C
CN2C
CN3A
CN3B
CN3C
CN1C
CN7
CN8
CN39
CN40
CN9
+5V
R1
R2
R3 100
C1 220
C2 220
C3 220
C4 220

MB-236

1-630-359-11(1)
BVX-100/100P

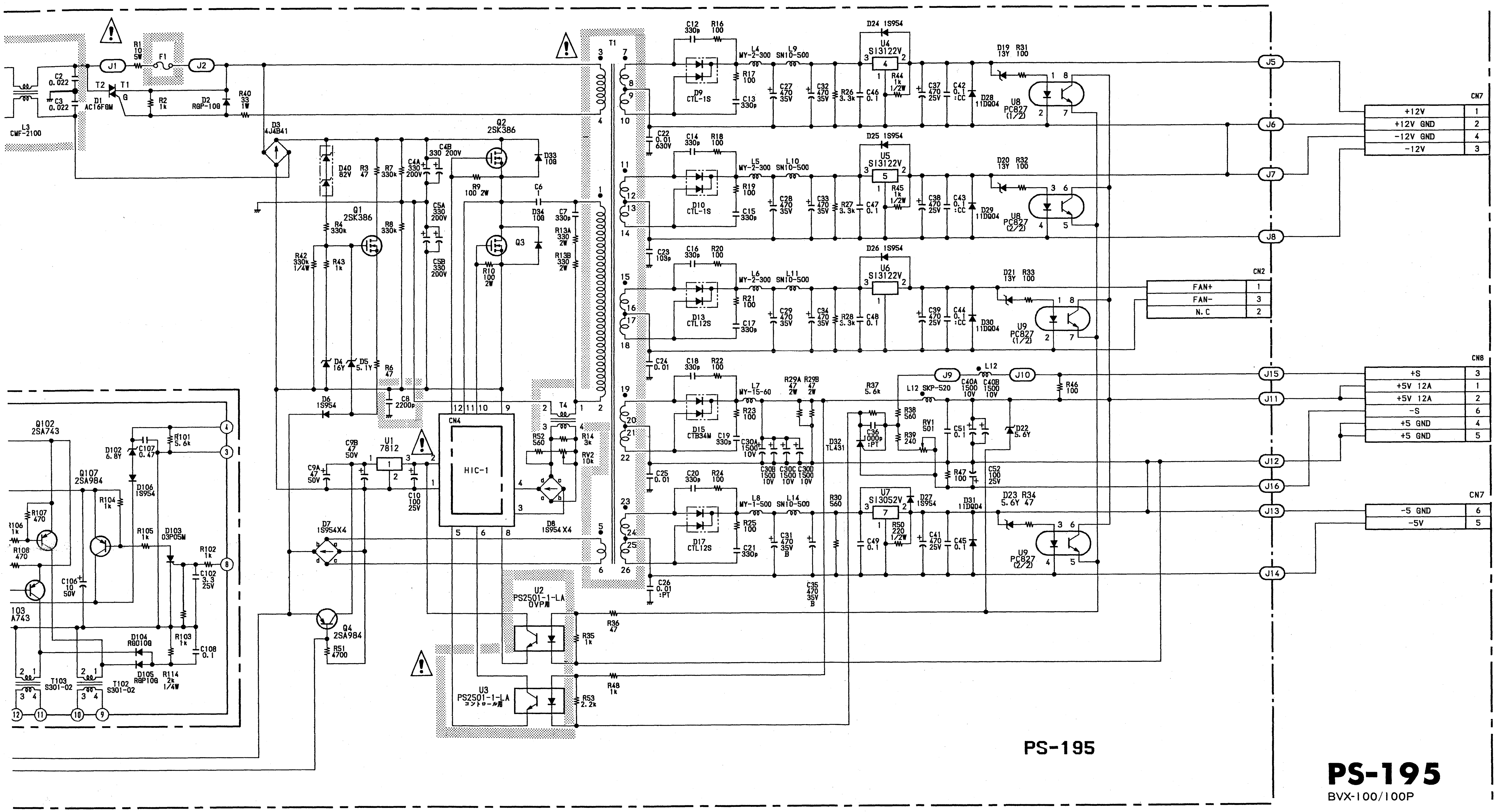
PS-195 ; REGULATOR


AC POWER SW
BREAKER
(EK)
(UC BRZ)
(J)
S1
CN1
1 ACH
2 ACN
CN3
1 VOLT SEL 1
2 VOLT SEL 2
L1 SN12-500
L2 SN12-500
L3 CMF-2100
C1 0.47
C2 0.022
C3 0.022
D1 AC16FGM
T2 T1 G
J1
J2
R1 10 5W
F1
R2 1k
D2 RGP-10G
R40 33 1W
D3 4J4B41
D40 82V
R3 47
R7 330k
C4A 330 200V
C4B 330 200V
Q2 2SK386
D33 10G
R9 100 2W
C6 1
D34 10G
C7 330p
R13A 330 2W
R13B 330 2W
Q1 2SK386
Q3
R4 330k
R8 330k
C5A 330 200V
C5B 330 200V
R42 330k 1/4W
R43 1k
R10 100 2W
D4 16V
D5 5.1V
R6 47
D6 1S954
C8 2200p
T1
T4
R52 560
R14 3k
RV2 10k
C9B 47 50V
C9A 47 50V
U1 7812
C10 100 25V
CN4
HIC-1
D7 1S954X4
D8 1S954X4
Q4 2SA984
R51 4700
U2 PS2501-1-LA OVP用
U3 PS2501-1-LA コントロール用
R35 1k
R36 47
R53 2.2k
R48 1k
C12 330p
R16 100
L4 MY-2-300
L9 SN10-500
D24 1S954
U4 SI3122V
R17 100
D9 CTL-1S
C13 330p
C27 470 35V
C32 470 35V
R26 3.3k
C46 0.1
R44 1k 1/2W
C22 0.01 630V
C14 330p
R18 100
L5 MY-2-300
L10 SN10-500
D25 1S954
U5 SI3122V
R19 100
D10 CTL-1S
C15 330p
C28 470 35V
C33 470 35V
R27 3.3k
C47 0.1
R45 1k 1/2W
C23 103p
C16 330p
R20 100
L6 MY-2-300
L11 SN10-500
D26 1S954
U6 SI3122V
R21 100
D13 CTL12S
C17 330p
C29 470 35V
C34 470 35V
R28 3.3k
C48 0.1
C24 0.01
C18 330p
R22 100
L7 MY-15-60
R29A 47 2W
R29B 47 2W
R37 5.6k
L12
R23 100
D15 CTB34M
C19 330p
C30A 1500 10V
C30B 1500 10V
C30C 1500 10V
C30D 1500 10V
D32 TL431
C36 1000p :PT
R38 560
R39 240
C25 0.01
C20 330p
R24 100
L8 MY-1-500
L14 SN10-500
R30 560
U7 SI3052V
R25 100
D17 CTL12S
C21 330p
C31 470 35V B
C35 470 35V B
C49 0.1
R50 220 1/2W
C26 0.01 :PT
U101 TL594
C103 10 50V
RV101 10k
C104A 100 25V
C104B 100 25V
C104C 100 25V
R110 100
R113 4700
C105 1000p
R111 10k
R116 1800
R115 20k
R109 1k
Q102 2SA743
Q107 2SA984
Q103 2SA743
D102 6.8V
C107 0.47
R101 5.6k
D106 1S954
R104 1k
R106 1k
R107 470
R108 470
C107 10 50V
C106 10 50V
R105 1k
D103 03P05M
R102 1k
C102 3.3 25V
D104 RGP10G
D105 RGP10G
R103 1k
C108 0.1
R114 2k 1/4W
T103 S301-02
T102 S301-02
HIC-1

NOTE:

The shaded and ⚠ -marked components are critical to safety.
Replace only with same components as specified.

A B C D E F G H


L3
CMF-2100
C2
0.022
C3
0.022
J1
R1
10
5W
F1
J2
T2
T1
D1
AC16F8M
G
R2
1k
D2
RGP-10G
R40
33
1W
D3
4J4B41
D40
82V
R3
47
R7
330k
C4A
330
200V
C4B
330 200V
Q2
2SK386
D33
10G
R9
100 2W
C6
Q1
2SK386
R4
330k
R8
330k
C5A
330
200V
C5B
330
200V
D34
10G
C7
330p
R13A
330
2W
R13B
330
2W
Q3
R10
100
2W
R42
330k
1/4W
R43
1k
D4
16Y
D5
5.1Y
R6
47
D6
1S954
C8
2200p
T1
T4
R52
560
R14
3k
RV2
10k
C9B
47
50V
C9A
47
50V
U1
7812
C10
100
25V
CN4
HIC-1
D8
1S954 X4
D7
1S954X4
Q4
2SA984
R51
4700
U2
PS2501-1-LA
OVP用
U3
PS2501-1-LA
コントロール用
R35
1k
R36
47
R48
1k
R53
2.2k
Q102
2SA743
D102
6.8Y
C107
0.47
R101
5.6k
Q107
2SA984
R104
1k
D106
1S954
R107
470
R106
1k
R108
470
R105
1k
D103
03P05M
R102
1k
C102
3.3
25V
C106
10
50V
103
A743
D104
RG010G
R103
1k
C108
0.1
D105
RGP10G
R114
2k
1/4W
T103
S301-02
T102
S301-02
C12
330p
R16
100
L4
MY-2-300
L9
SN10-500
D9
CTL-1S
R17
100
C13
330p
C27
470
35V
C32
470
35V
R26
3.3k
C46
0.1
D24 1S954
U4
SI3122V
R44
1k
1/2W
C37
470
25V
C42
0.1
:CC
D28
11DQ04
D19 R31
13Y 100
U8
PC827
(1/2)
C22
0.01
630V
C14
330p
R18
100
L5
MY-2-300
L10
SN10-500
D10
CTL-1S
R19
100
C15
330p
C28
470
35V
C33
470
35V
R27
3.3k
C47
0.1
D25 1S954
U5
SI3122V
R45
1k
1/2W
C38
470
25V
C43
0.1
:CC
D29
11DQ04
D20 R32
13Y 100
U8
PC827
(2/2)
C23
103p
C16
330p
R20
100
L6
MY-2-300
L11
SN10-500
D13
CTL12S
R21
100
C17
330p
C29
470
35V
C34
470
35V
R28
3.3k
C48
0.1
D26 1S954
U6
SI3122V
C39
470
25V
C44
0.1
:CC
D30
11DQ04
D21 R33
13Y 100
U9
PC827
(1/2)
C24
0.01
C18
330p
R22
100
L7
MY-15-60
R29A
47
2W
R29B
47
2W
D15
CTB34M
R23
100
C19
330p
C30A
1500
10V
C30B
1500
10V
C30C
1500
10V
C30D
1500
10V
D32
TL431
R37
5.6k
L12 SKP-520
J9
C40A
1500
10V
C40B
1500
10V
L12
J10
R46
100
R38
560
C36
1000p
:PT
R39
240
RV1
501
C51
0.1
D22
5.6Y
R47
100
C52
100
25V
C25
0.01
C20
330p
R24
100
L8
MY-1-500
L14
SN10-500
D17
CTL12S
R25
100
C21
330p
C31
470
35V
B
R30
560
C35
470
35V
B
U7
SI3052V
D27
1S954
R50
220
1/2W
C49
0.1
C41
470
25V
C45
0.1
D31
11DQ04
D23 R34
5.6Y 47
U9
PC827
(2/2)
C26
0.01
:PT
J5
J6
J7
J8
J15
J11
J12
J16
J13
J14
CN7
+12V 1
+12V GND 2
-12V GND 4
-12V 3
CN2
FAN+ 1
FAN- 3
N.C 2
CN8
+S 3
+5V 12A 1
+5V 12A 2
-S 6
+5 GND 4
+5 GND 5
CN7
-5 GND 6
-5V 5
PS-195

PS-195
BVX-100/100P

EX-205; EXTENSION BOARD

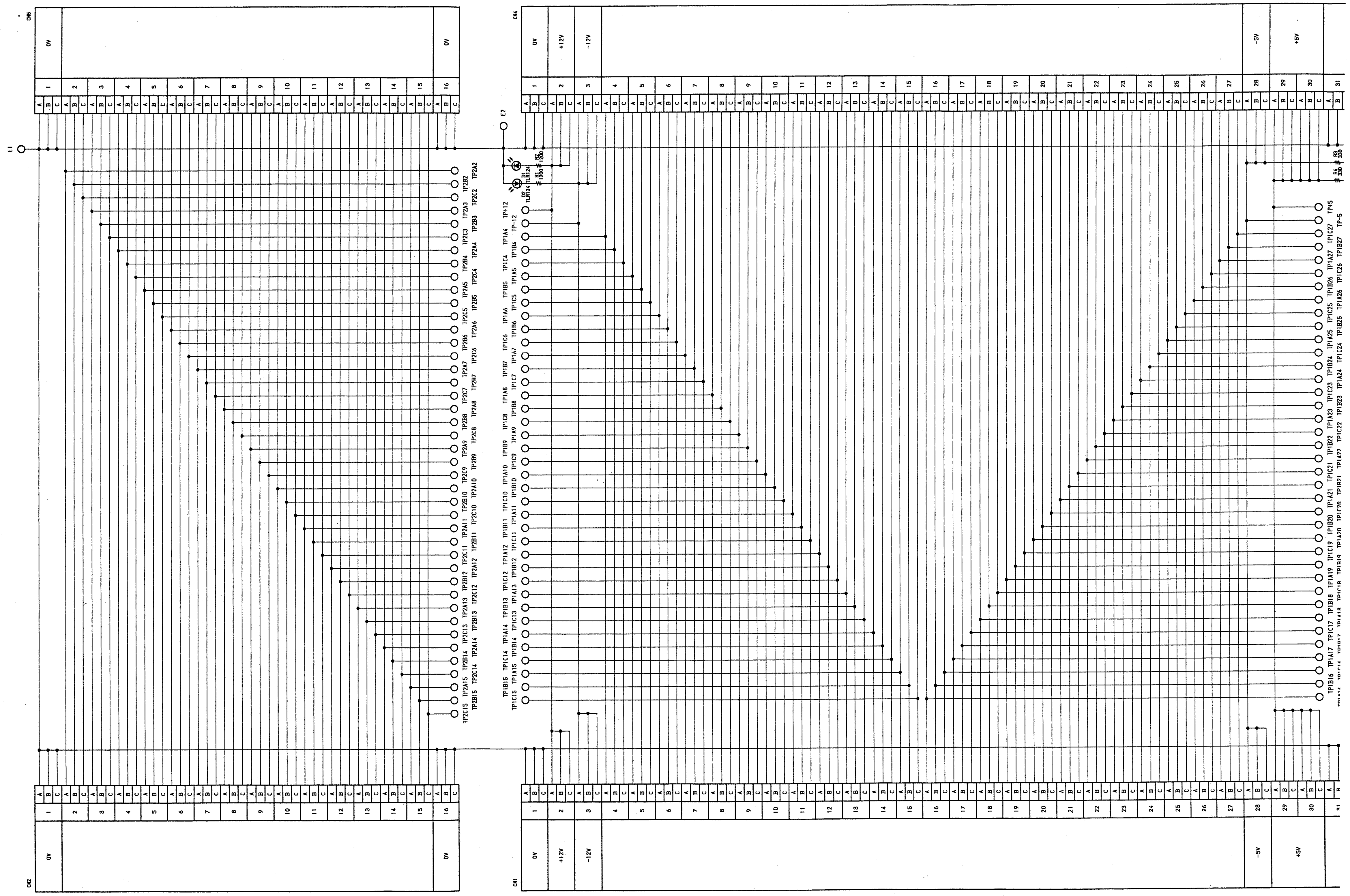
1

2

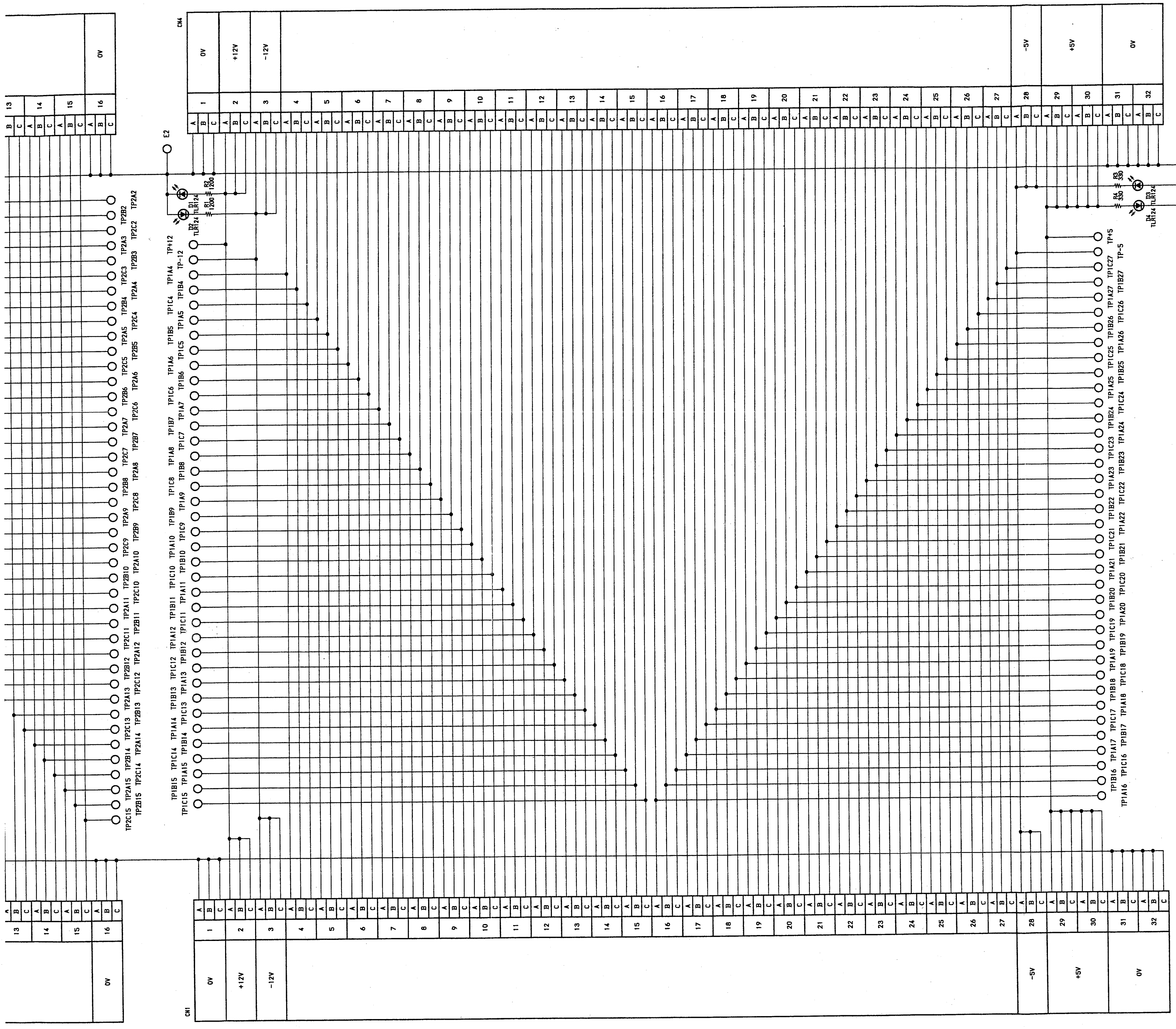
3

4

5


CN5
CN4
CN2
CN1
E1
E2
0V
+12V
-12V
-5V
+5V
D1 TLR124
D2 TLR124
R1 1200
R2 1200
R3 330
R4 330
A B C
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16
17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
TP+12
TP-12
TP+5
TP-5
TP2A2 TP2B2 TP2C2 … TP2A15 TP2B15 TP2C15
TP1A4 TP1B4 TP1C4 … TP1A27 TP1B27 TP1C27

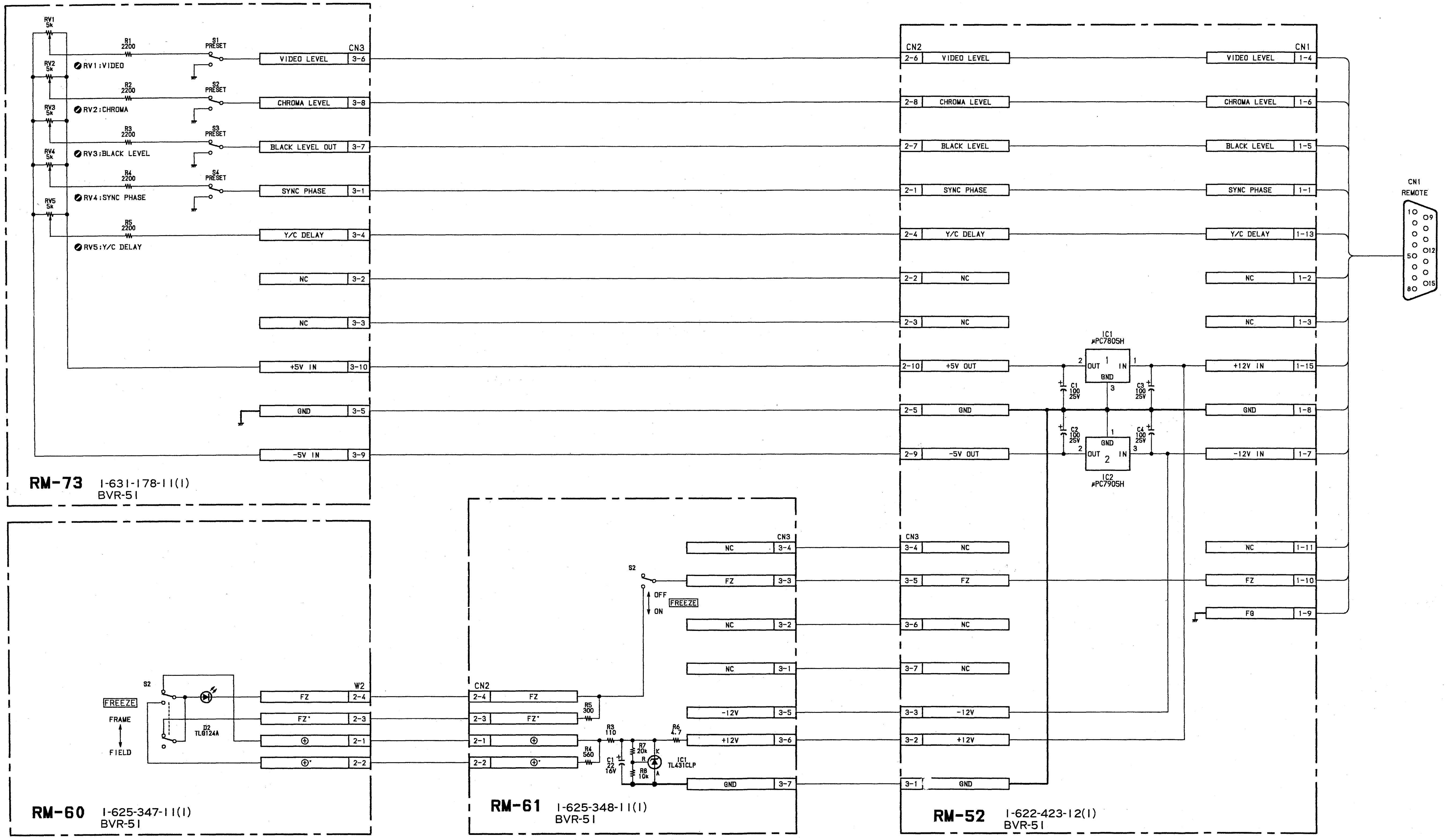
A B C D E F G H

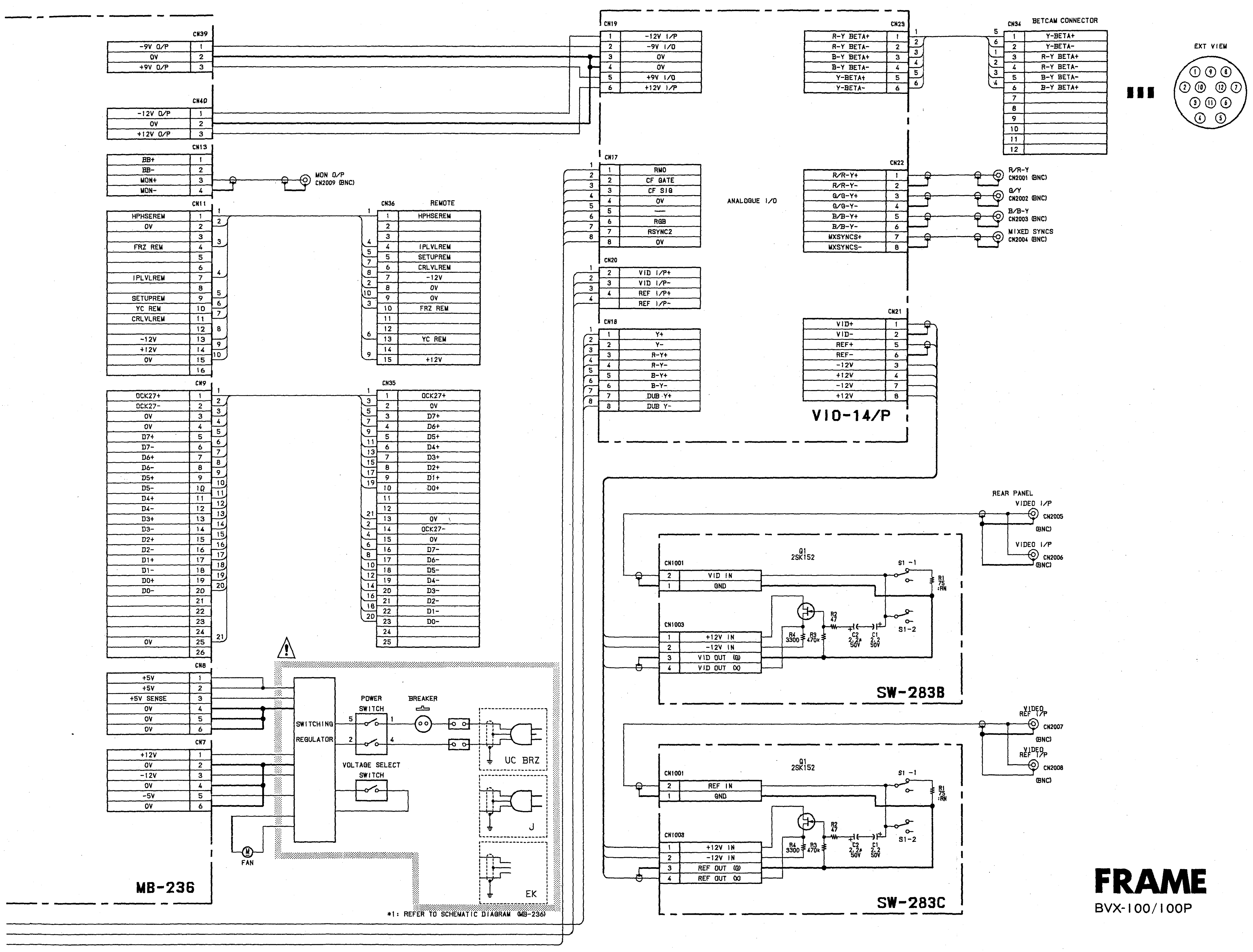

CN4
CN1
E2
E3
0V
+12V
-12V
-5V
+5V
TP+12
TP-12
TP+5
TP-5

EX-205

1-630-357-11(1)
BVX-100/100P

RM-573C, RM-52C, RM-60B, RM-61B ; REMOTE CONTROL


RV1 5k
RV2 5k
RV3 5k
RV4 5k
RV5 5k
R1 2200
R2 2200
R3 2200
R4 2200
R5 2200
S1 PRESET
S2 PRESET
S3 PRESET
S4 PRESET
RV1:VIDEO
RV2:CHROMA
RV3:BLACK LEVEL
RV4:SYNC PHASE
RV5:Y/C DELAY
CN3
VIDEO LEVEL 3-6
CHROMA LEVEL 3-8
BLACK LEVEL OUT 3-7
SYNC PHASE 3-1
Y/C DELAY 3-4
NC 3-2
NC 3-3
+5V IN 3-10
GND 3-5
-5V IN 3-9
RM-73 1-631-178-11(1) BVR-51
CN2
2-6 VIDEO LEVEL
2-8 CHROMA LEVEL
2-7 BLACK LEVEL
2-1 SYNC PHASE
2-4 Y/C DELAY
2-2 NC
2-3 NC
2-10 +5V OUT
2-5 GND
2-9 -5V OUT
IC1 μPC7805H
OUT IN GND
C1 100 25V
C2 100 25V
C3 100 25V
C4 100 25V
IC2 μPC7905H
CN1
VIDEO LEVEL 1-4
CHROMA LEVEL 1-6
BLACK LEVEL 1-5
SYNC PHASE 1-1
Y/C DELAY 1-13
NC 1-2
NC 1-3
+12V IN 1-15
GND 1-8
-12V IN 1-7
NC 1-11
FZ 1-10
FG 1-9
CN1 REMOTE
1 9 12 5 15 8
CN3
3-4 NC
3-5 FZ
3-6 NC
3-7 NC
3-3 -12V
3-2 +12V
3-1 GND
RM-52 1-622-423-12(1) BVR-51
S2
OFF
ON
FREEZE
NC 3-4
FZ 3-3
NC 3-2
NC 3-1
-12V 3-5
+12V 3-6
GND 3-7
CN2
2-4 FZ
2-3 FZ'
2-1 ⊕
2-2 ⊕'
R5 300
R3 110
R4 560
R6 4.7
R7 20k
R8 10k
C1 22 16V
IC1 TL431CLP
RM-61 1-625-348-11(1) BVR-51
S2
FREEZE
FRAME
FIELD
D2 TLG124A
W2
FZ 2-4
FZ' 2-3
⊕ 2-1
⊕' 2-2
RM-60 1-625-347-11(1) BVR-51


MB-236
CN39
-9V O/P
0V
+9V O/P
CN40
-12V O/P
0V
+12V O/P
CN13
BB+
BB-
MON+
MON-
MON O/P
CN2009 (BNC)
CN11
HPHSEREM
FRZ REM
IPLVLREM
SETUPREM
YC REM
CRLVLREM
-12V
+12V
CN36
REMOTE
CN9
DCK27+
DCK27-
D7+
D7-
D6+
D6-
D5+
D5-
D4+
D4-
D3+
D3-
D2+
D2-
D1+
D1-
D0+
D0-
CN35
CN8
+5V
+5V SENSE
CN7
-5V
FAN
SWITCHING REGULATOR
POWER SWITCH
BREAKER
VOLTAGE SELECT SWITCH
UC BRZ
J
EK
*1: REFER TO SCHEMATIC DIAGRAM (MB-236)
CN19
-12V I/P
-9V I/O
+9V I/O
+12V I/P
CN17
RMO
CF GATE
CF SIG
RGB
RSYNC2
CN20
VID I/P+
VID I/P-
REF I/P+
REF I/P-
CN18
Y+
Y-
R-Y+
R-Y-
B-Y+
B-Y-
DUB Y+
DUB Y-
ANALOGUE I/O
CN23
R-Y BETA+
R-Y BETA-
B-Y BETA+
B-Y BETA-
Y-BETA+
Y-BETA-
CN22
R/R-Y+
R/R-Y-
G/B-Y+
G/B-Y-
B/B-Y+
B/B-Y-
MXSYNCS+
MXSYNCS-
CN21
VID+
VID-
REF+
REF-
VIO-14/P
CN34
BETCAM CONNECTOR
EXT VIEW
R/R-Y
CN2001 (BNC)
G/Y
CN2002 (BNC)
B/B-Y
CN2003 (BNC)
MIXED SYNCS
CN2004 (BNC)
REAR PANEL
VIDEO I/P
CN2005 (BNC)
VIDEO I/P
CN2006 (BNC)
VIDEO REF I/P
CN2007 (BNC)
VIDEO REF I/P
CN2008 (BNC)
CN1001
VID IN
GND
CN1003
+12V IN
-12V IN
VID OUT (1)
VID OUT (2)
Q1
2SK152
S1-1
S1-2
R1
75
R2
47
R3
470k
R4
3300
C1
2.2
50V
C2
2.2
50V
SW-283B
REF IN
REF OUT (1)
REF OUT (2)
SW-283C

FRAME

BVX-100/100P

NOTE:

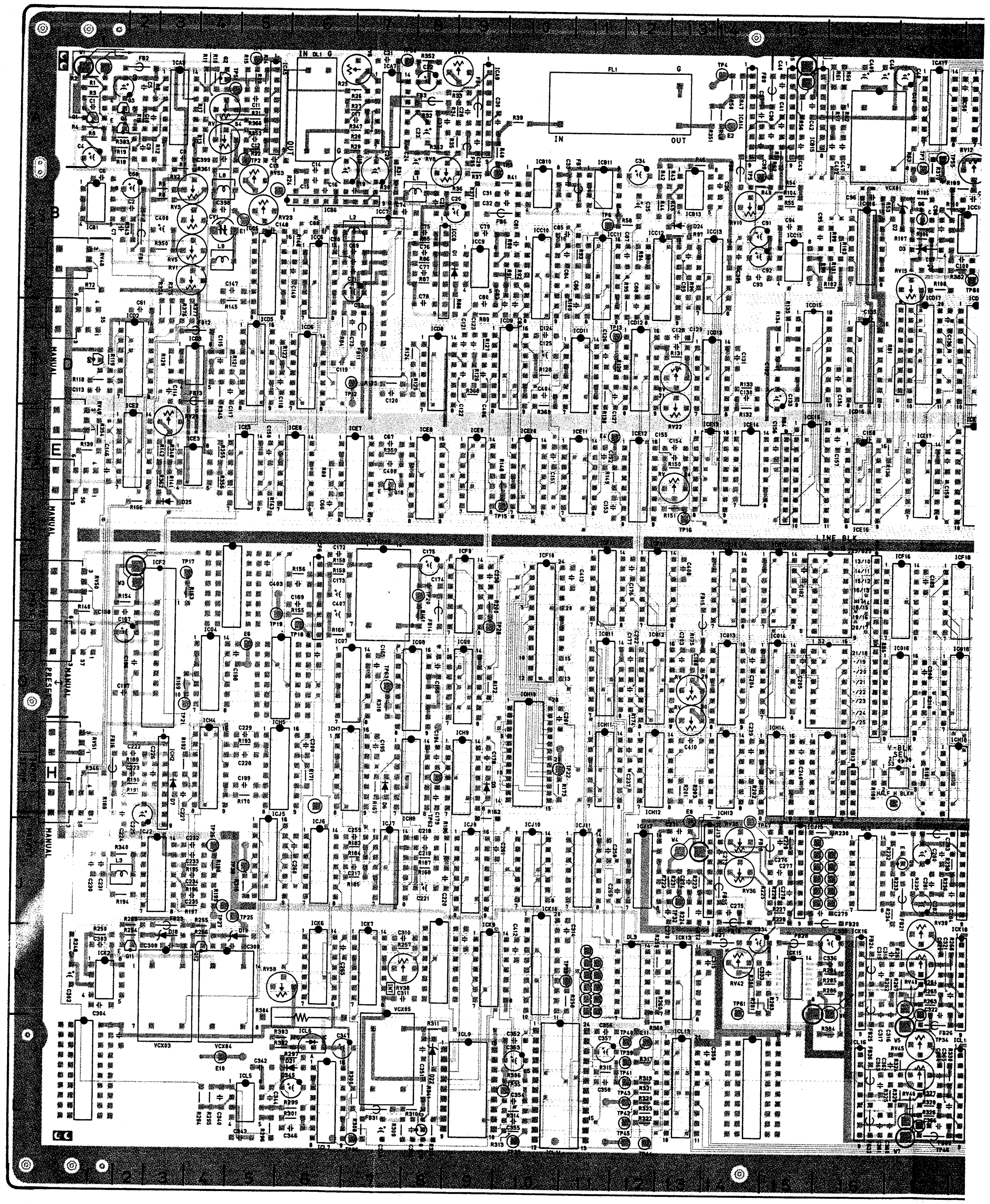
The shaded and ⚠ -marked components are critical to safety.
Replace only with same components as specified.

SECTION 8
PRINTED CIRCUIT BOARD

DAD-6/P(1-630-361-11)

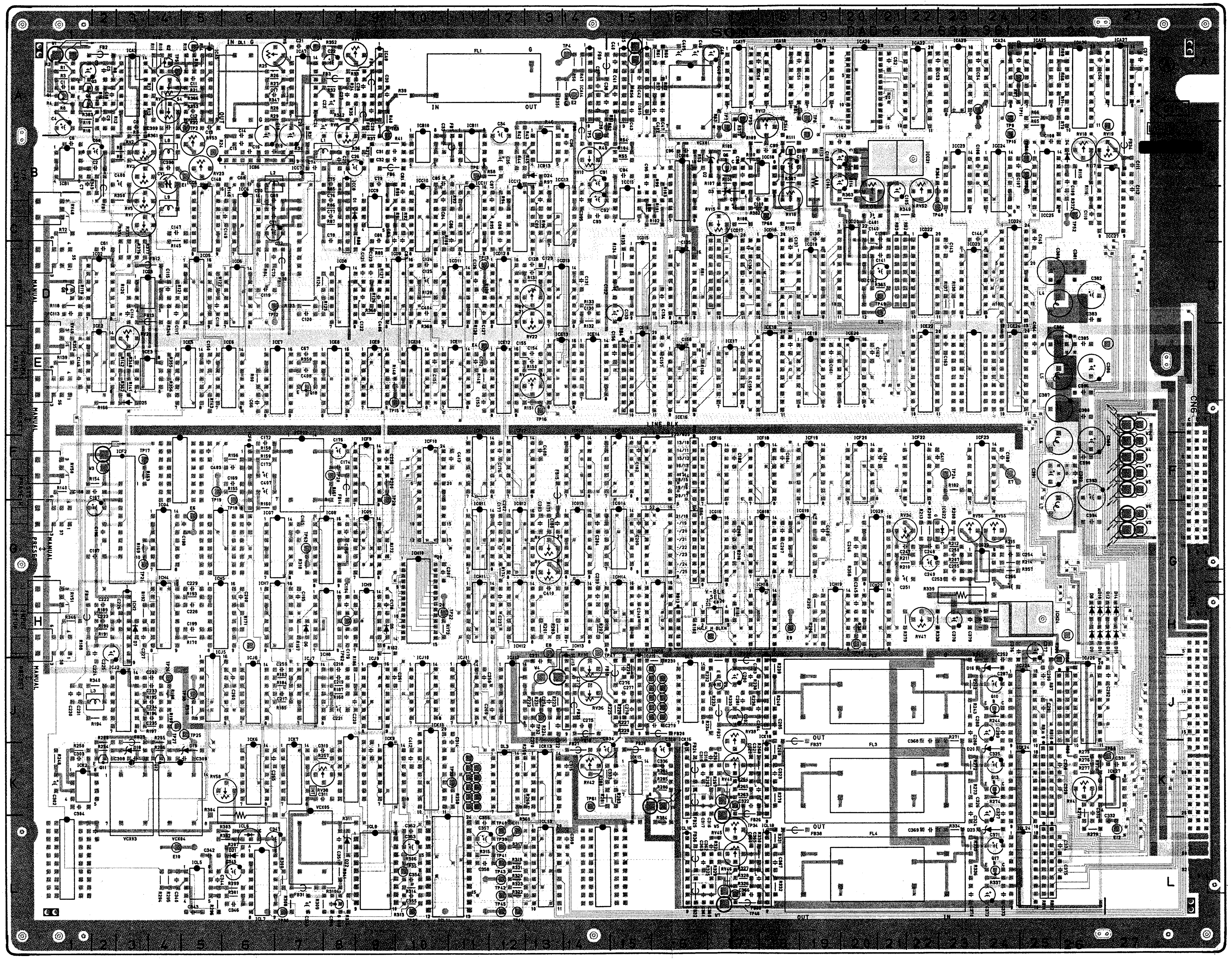
CN5	K-27
CN6	F-27
CV1	B-4
D1	C-8
D2	B-17
D3	B-26
D4	B-26
D5	H-9
D6	H-7
D7	H-3
D8	H-26
D9	H-26
D10	H-26
D11	H-26
D12	H-26
D13	H-26
D14	H-27
D15	H-27
D16	J-24
D18	K-3
D19	K-5
D20	K-24
D21	L-6
D22	L-8
D23	L-24
D24	B-13
D25	E-3
DL2	J-16
DL3	K-12
E1	B-5
E2	A-4
E3	A-24
E4	E-11
E5	D-21
E6	G-5
E7	F-24
E8	H-13
E9	H-18
E10	L-4
E11	L-12
E12	L-27
FL1	A-11
FL2	J-20
FL3	K-20
FL4	L-20
ICA3	A-3
ICA5	A-5
ICA7	A-7
ICA9	A-9
ICA14	A-14
ICA17	A-17
ICA18	A-18
ICA19	A-19
ICA20	A-20
ICA22	A-22
ICA23	A-23
ICA24	A-24
ICA25	A-25
ICA26	A-26
ICA27	A-27
ICB1	B-1
ICB6	B-6
ICB10	B-10
ICB11	B-11
ICB13	B-13
ICB15	B-14
ICC5	C-5
ICC6	C-6
ICC7	C-7
ICC8	C-8
ICC9	C-9
ICC10	C-10
ICC11	C-11
ICC12	C-12
ICC15	C-15
ICC16	C-16
ICC18	C-18
ICC21	C-21
ICC23	C-23
ICC24	C-24
ICC25	C-25
ICC27	C-27
ICD2	D-2
ICD3	D-3
ICD5	D-5
ICD6	D-6
ICD8	D-8
ICD9	D-9
ICD11	D-11
ICD12	D-12
ICD13	D-13
ICD15	D-15
ICD16	D-16
ICD17	D-17
ICD18	D-18
ICD19	D-19
ICD20	D-20
ICD22	D-22
ICD23	D-23
ICD24	D-24
ICE2	E-2
ICE5	E-5
ICE6	E-6
ICE7	E-7
ICE8	E-8
ICE9	E-9
ICE10	E-10
ICE11	E-11
ICE12	E-12
ICE13	E-13
ICE14	E-14
ICE15	E-15
ICE16	E-16
ICE17	E-17
ICE18	E-18
ICE19	E-19
ICE20	E-20
ICE22	E-22
ICE24	E-24
ICF6	F-6
ICF9	F-9
ICF10	F-10
ICF11	F-11
ICF12	F-12
ICF13	F-14
ICF14	F-15
ICF16	F-16
ICF18	F-18
ICF19	F-19
ICF20	F-20
ICF22	F-22
ICF23	F-23
ICG4	G-4
ICG7	G-7
ICG8	G-8
ICG9	G-9
ICG11	G-11
ICG12	G-12
ICG13	G-14
ICG14	G-15
ICG16	G-16
ICG18	G-18
ICG19	G-19
ICG20	G-20
ICG22	G-22
ICG23	G-23
ICH5	H-5
ICH7	H-7
ICH8	H-8
ICH9	H-9
ICH10	H-10
ICH11	H-11
ICH12	H-12
ICH13	H-13
ICH14	G-15
ICH15	H-16
ICH18	H-18
ICH19	H-19
ICH20	H-20
ICH24	H-24
ICJ2	J-3
ICJ5	J-5
ICJ6	J-6
ICJ7	J-7
ICJ9	J-9
ICJ10	J-10
ICJ11	J-11
ICJ12	J-13
ICJ13	J-14
ICJ24	J-24
ICJ26	J-26
ICK2	K-2
ICK6	K-6
ICK7	K-7
ICK9	K-9
ICK10	K-10
ICK13	K-13
ICK15	K-15
ICK16	K-16
ICK18	K-18
ICK24	K-24
ICK27	K-27
ICL5	L-5
ICL6	L-6
ICL7	L-6
ICL9	L-9
ICL11	L-11
ICL13	L-13
ICL16	L-16
ICL18	L-18
ICL24	L-24
Q1	A-1
Q2	A-4
Q3	A-1
Q4	A-1
Q6	B-17
Q7	B-18
Q8	D-1
Q10	J-24
Q11	K-2
Q12	K-4
Q13	K-24
Q16	L-8
Q17	L-24
Q18	E-7
RB1	D-17
RB2	D-21
RB3	D-21
RB5	F-16
RB6	G-16
RB7	J-25
RB8	J-26
RB9	K-25
RB10	L-25
RB11	L-25
RB12	H-16
RB13	H-15
RV1	C-3
RV2	B-3
RV3	B-3
RV4	A-4
RV5	C-3
RV6	A-6
RV7	A-9
RV8	A-8
RV10	B-14
RV12	A-18
RV15	C-17
RV16	C-18
RV17	C-20
RV18	B-26
RV19	B-27
RV20	E-3
RV21	E-13
RV22	D-13
RV23	B-15
RV24	E-13
RV29	G-13
RV30	G-13
RV34	G-21
RV35	J-14
RV36	J-14
RV38	K-8
RV39	J-17
RV40	K-17
RV41	K-26
RV42	K-14
RV45	L-17
RV46	L-17
RV47	H-22
RV48	C-1
RV49	E-1
RV50	F-1
RV51	H-1
RV52	C-22
RV53	B-5
RV54	A-4
RV55	G-24
RV56	G-23
RV58	K-6
S1	F-16
S2	G-16
S3	H-17
S5	D-1
S6	E-1
S7	G-1
S8	H-1
TP1	A-5
TP2	A-5
TP3	B-9
TP4	A-14
TP5	B-14
TP6	B-11
TP7	A-17
TP8	A-19
TP9	A-24
TP10	B-24
TP11	A-24
TP12	D-6
TP13	D-11
TP15	E-10
TP16	E-13
TP17	F-13
TP18	G-6
TP19	F-5
TP20	F-8
TP21	G-3
TP22	H-10
TP24	F-23
TP25	J-5
TP26	J-4
TP27	J-4
TP28	F-9
TP32	J-13
TP33	K-11
TP34	K-17
TP35	L-10
TP36	L-7
TP37	L-10
TP38	J-5
TP39	L-12
TP40	L-12
TP41	L-12
TP42	L-12
TP43	L-12
TP44	L-12
TP45	L-12
TP46	L-17
TP47	H-14
TP49	D-21
TP50	A-7
TP51	A-4
TP52	C-26
TP53	B-25
TP54	B-25
TP55	A-17
TP56	J-25
TP57	H-20
TP59	K-27
TP60	C-18
TP61	K-14
TP62	H-8
TP63	G-7

DAD-6/P; ANALOGUE PROCESSOR



DAD-6/P; ANALOGUE PROCESSOR

8	G-6
9	F-5
0	F-8
1	G-3
2	H-10
4	F-23
5	J-5
6	J-4
7	J-4
8	F-9
2	J-13
3	K-11
4	K-17
5	L-10
6	L-7
7	L-10
8	J-5
9	L-12
0	L-12
1	L-12
2	L-12
3	L-12
4	L-12
5	L-12
6	L-17
7	H-14
9	D-21
0	A-7
1	A-4
2	C-26
3	B-25
4	B-25
5	A-17
6	J-25
7	H-20
9	K-27
0	C-18
1	K-14
2	H-8
3	G-7

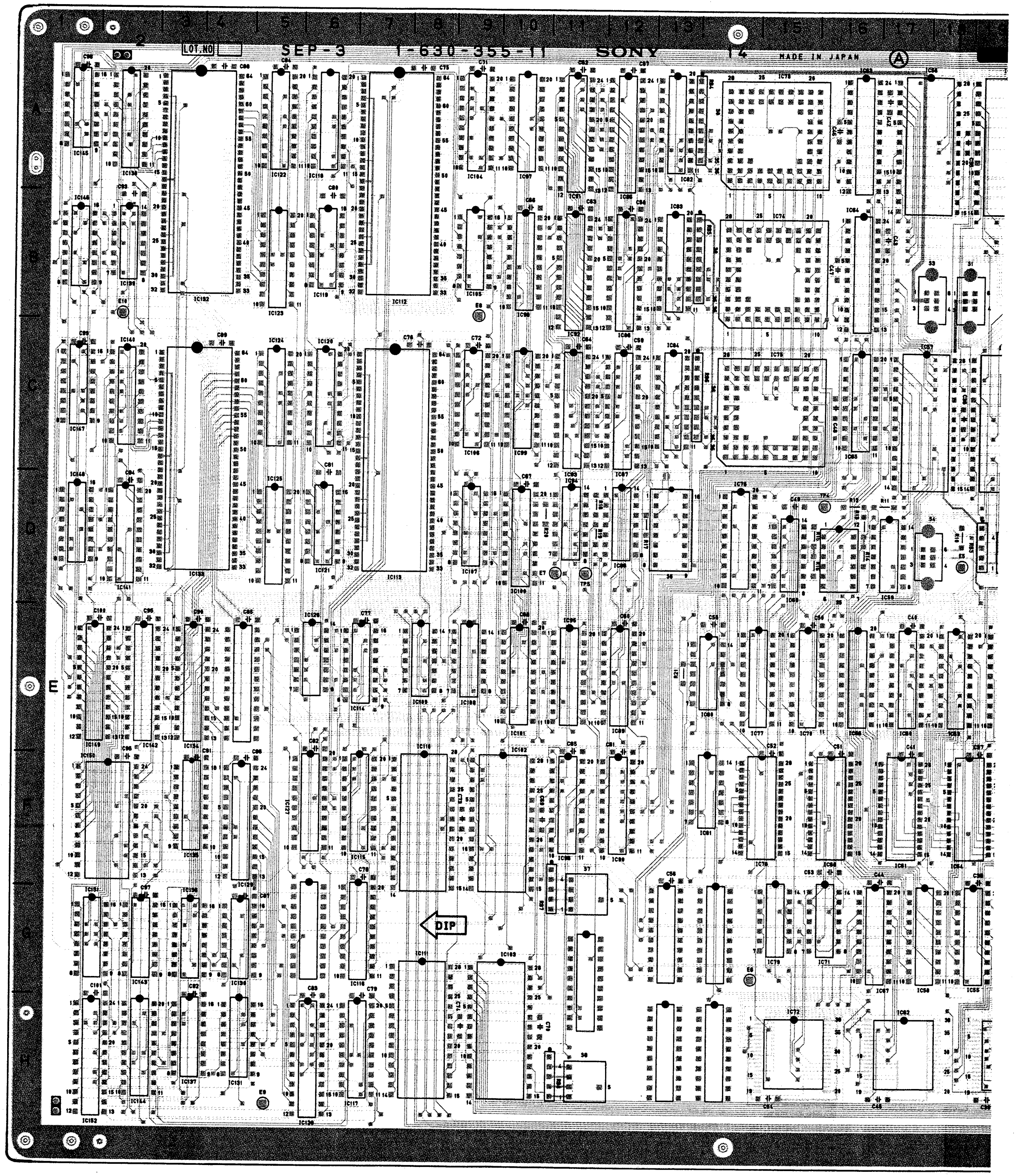


DAD-6/P —COMPONENT SIDE—
1-630-361-11(1)
BVX-100/100P

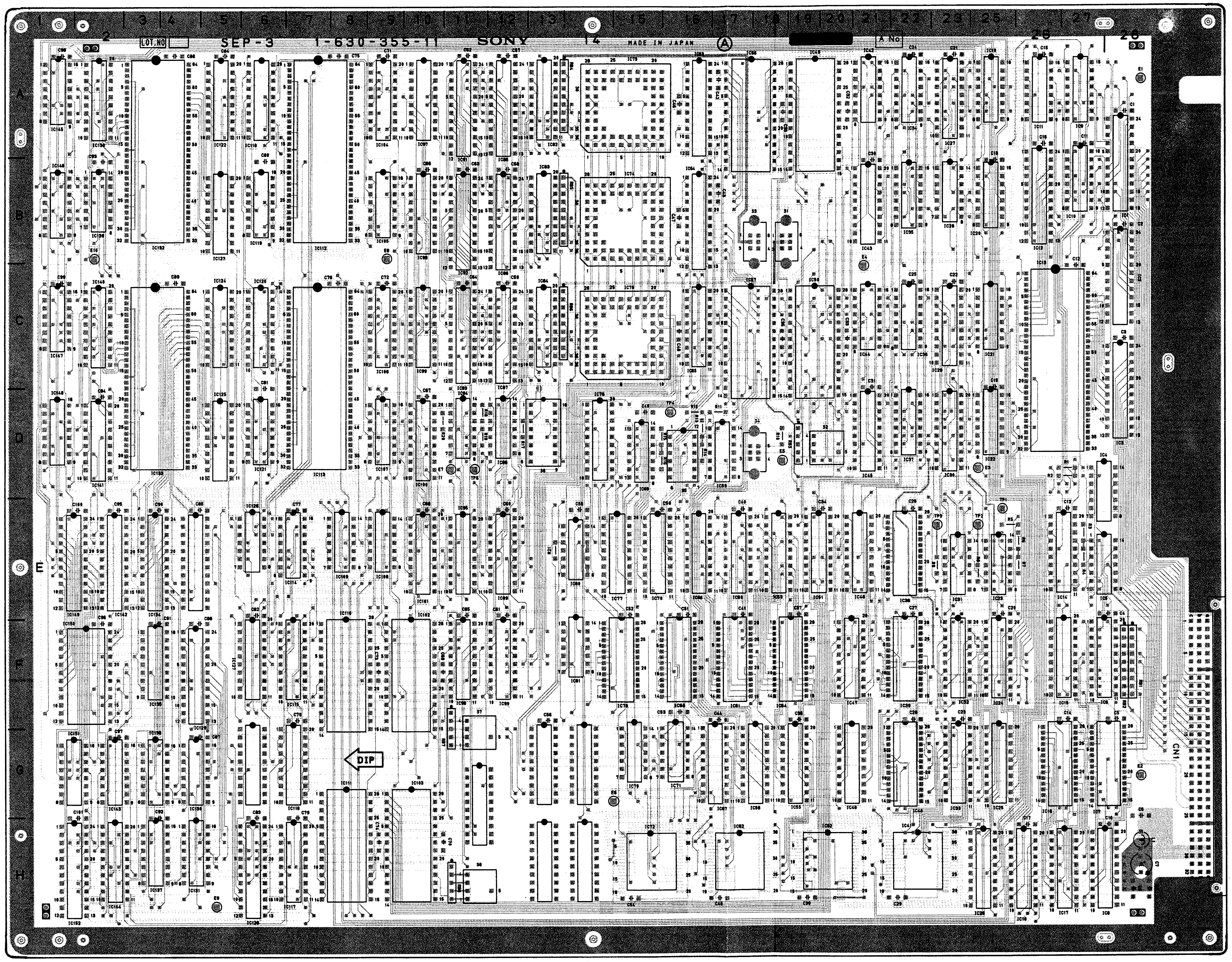
SEP-3/P(1-630-355-11)

CN1	G-28	IC48	G-20	IC108	E-9	S5	D-16
		IC49	A-19	IC109	E-8	S6	D-13
E1	A-28	IC50	C-19	IC110	F-8	S7	F-11
E2	G-28	IC51	E-19	IC111	H-8	S8	H-11
E3	D-25	IC52	H-19	IC112	A-7		
E4	C-21	IC53	E-18	IC113	C-7	TP1	E-25
E5	D-18	IC54	F-18	IC114	E-7	TP2	E-25
E6	G-6	IC56	A-17	IC115	F-7	TP3	E-23
E7	D-11	IC57	C-17	IC116	G-7	TP4	D-16
E8	B-9	IC58	G-17	IC117	H-7	TP5	D-11
E9	H-5	IC59	D-17	IC118	A-6		
E10	B-2	IC60	E-17	IC119	B-6		
		IC61	F-17	IC120	C-6		
IC1	A-28	IC62	H-17	IC121	D-6		
IC2	B-28	IC63	A-16	IC122	A-5		
IC3	D-28	IC66	E-16	IC123	B-5		
IC4	D-27	IC67	G-17	IC124	C-5		
IC5	E-27	IC68	F-16	IC125	D-5		
IC6	F-27	IC69	D-15	IC126	E-6		
IC7	G-27	IC70	E-15	IC127	F-6		
IC8	H-27	IC71	G-16	IC128	H-6		
IC9	A-27	IC72	H-15	IC129	F-4		
IC10	B-27	IC73	A-15	IC130	G-4		
IC11	A-26	IC74	B-15	IC131	H-4		
IC12	B-26	IC75	C-15	IC132	A-3		
IC13	C-26	IC76	D-14	IC133	C-3		
IC14	E-26	IC77	E-15	IC134	E-3		
IC15	F-26	IC78	F-15	IC135	F-3		
IC16	G-26	IC79	G-15	IC136	G-3		
IC17	H-26	IC80	E-14	IC137	H-3		
IC19	A-25	IC81	F-14	IC138	A-2		
IC20	B-25	IC82	A-13	IC139	B-2		
IC21	C-25	IC83	B-13	IC140	C-2		
IC22	D-25	IC84	C-13	IC141	D-2		
IC23	E-25	IC84	B-16	IC142	E-2		
IC24	F-25	IC85	A-12	IC143	G-2		
IC25	G-25	IC85	C-16	IC144	H-2		
IC26	H-15	IC86	B-12	IC145	A-1		
IC27	A-23	IC87	C-12	IC146	B-1		
IC28	B-23	IC88	D-12	IC147	C-1		
IC29	C-23	IC89	E-12	IC148	D-1		
IC30	D-23	IC90	F-12	IC149	E-1		
IC31	E-23	IC91	A-11	IC150	F-2		
IC32	F-23	IC92	B-11	IC151	G-1		
IC33	G-23	IC93	C-11	IC152	H-1		
IC34	A-22	IC94	D-11				
IC35	B-22	IC95	E-11	RB1	F-28		
IC36	C-22	IC96	F-11	RB2	F-28		
IC37	D-22	IC97	A-10	RB3	D-19		
IC38	E-22	IC98	B-10	RB4	A-14		
IC39	F-22	IC99	C-10	RB5	B-14		
IC40	G-22	IC100	D-10	RB6	C14		
IC41	H-22	IC101	E-10	RB7	G-11		
IC42	A-21	IC102	F-10	RB8	H-11		
IC43	B-21	IC103	H-10				
IC44	C-21	IC104	A-9	S1	B-18		
IC45	D-21	IC105	B-9	S2	D-19		
IC46	E-21	IC106	C-9	S3	B-17		
IC47	F-20	IC107	D-9	S4	D-17		

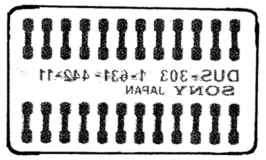
SEP-3/P ; Y/C SEPARATION



SEP-3/P; Y/C SEPARATION


SEP-3
1-630-355-11
SONY
LOT.NO
MADE IN JAPAN
A NO
DIP
CN1
A
B
C
D
E
F
G
H
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
21
22
23
25
26
27
28

SEP-3/P —COMPONENT SIDE—
1-630-355-11(1)
BVX-100/100P


DUS-303 1-631-442-11
SONY
JAPAN

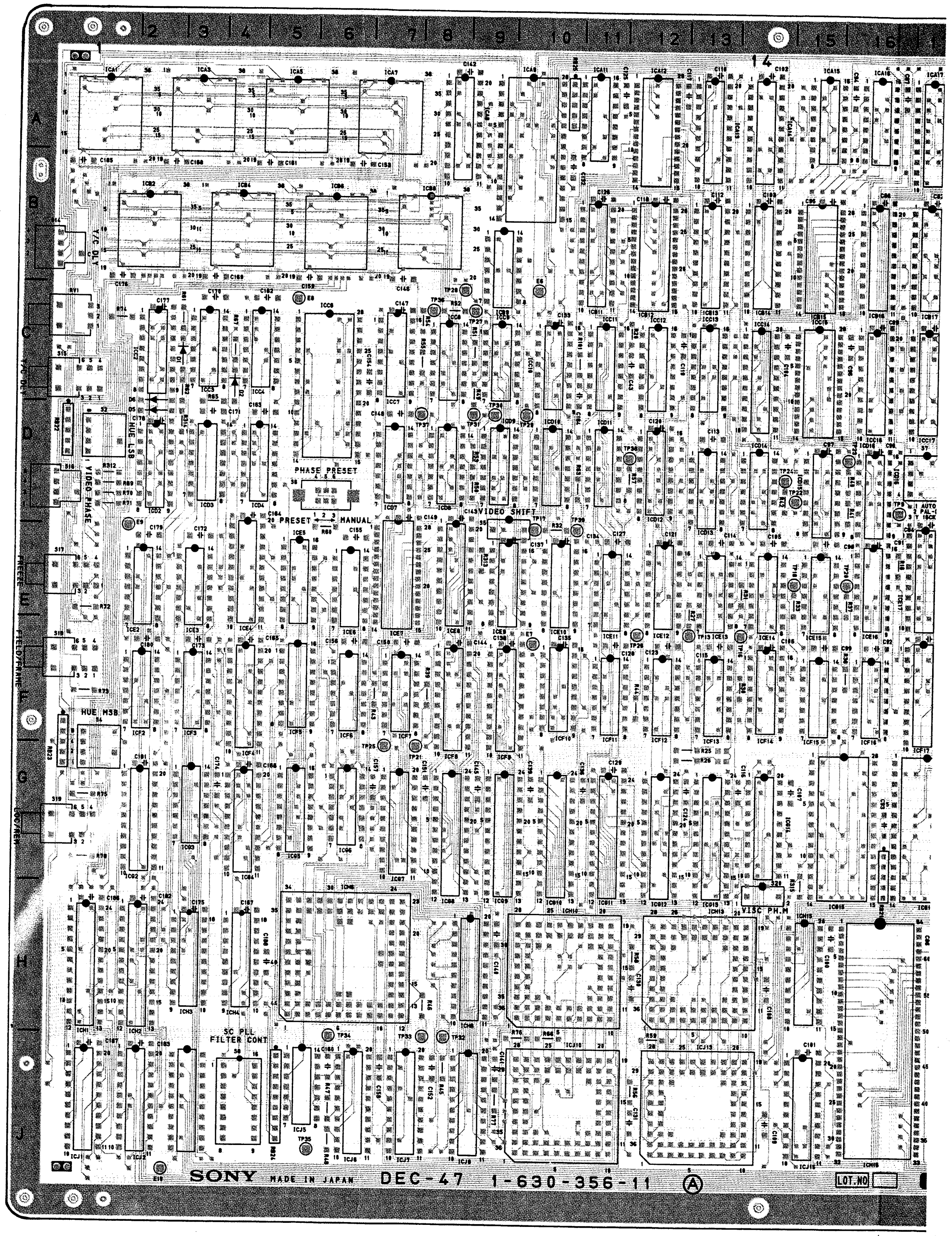
DUS-303 —COMPONENT SIDE—
1-631-442-11(1)
BVX-100/100P

UC, BRZ;	S/N 10001 thru. 10020
J;	S/N 10001 thru. 10010
EK;	S/N 10001 thru. 10030

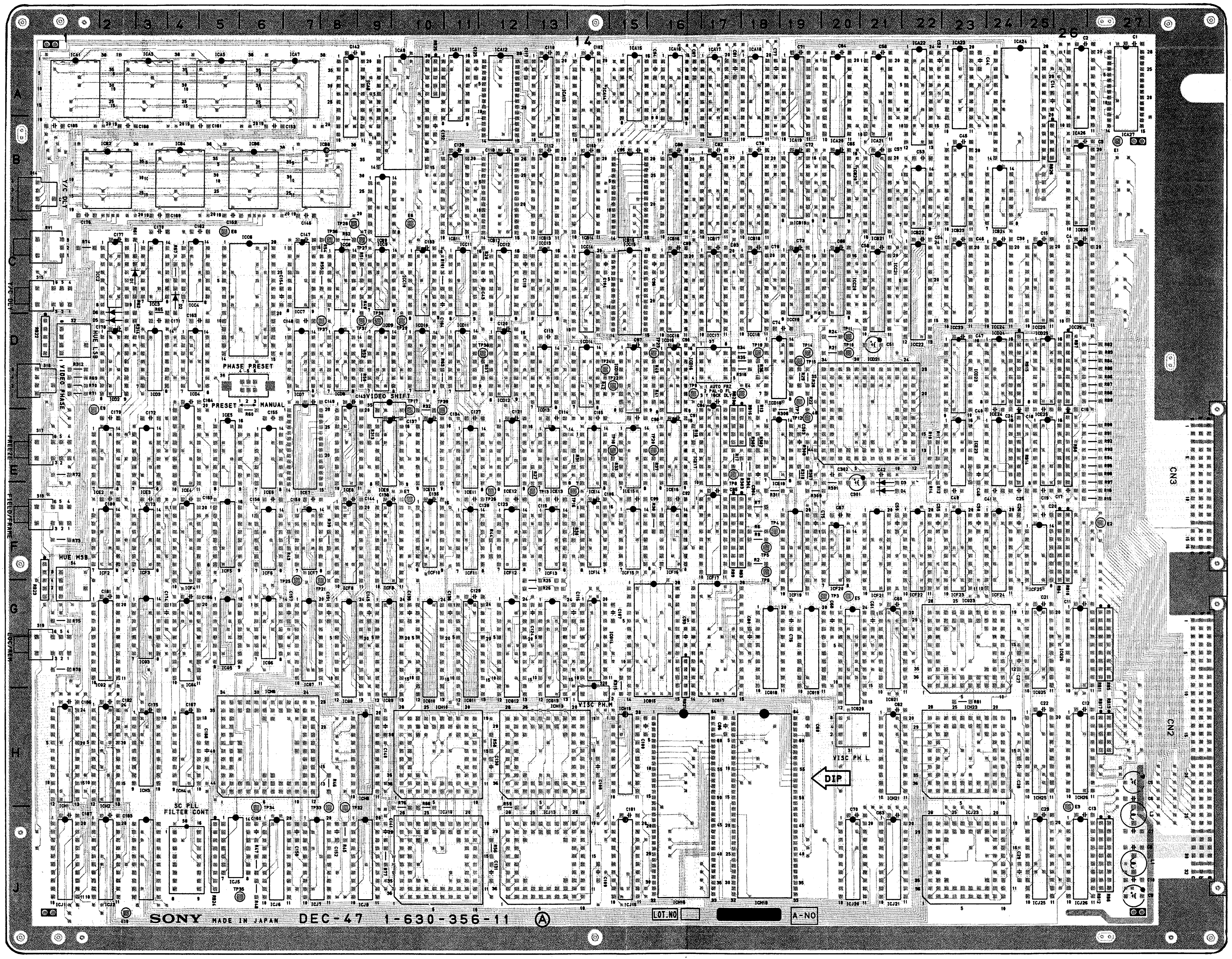
DEC-47/P ; DEMODULATOR

DEC-47/P(1-630-356-11)

CN2	H-28
CN3	F-28
D1	C-2
D2	C-4
D3	F-21
D4	F-21
D5	D-2
D6	C-2
E1	B-27
E2	E-27
E3	J-26
E4	D-17
E5	G-20
E6	C-10
E7	F-10
E8	C-5
E9	E-1
E10	J-2
ICA1	A-1
ICA3	A-3
ICA5	A-5
ICA7	A-7
ICA8	A-8
ICA9	A-10
ICA11	A-11
ICA12	A-12
ICA13	A-13
ICA14	A-14
ICA15	A-15
ICA16	A-16
ICA17	A-17
ICA18	A-18
ICA19	A-19
ICA20	A-20
ICA21	A-21
ICA22	A-22
ICA23	A-23
ICA24	A-24
ICA26	A-26
ICA27	A-27
ICB2	B-2
ICB4	B-4
ICB6	B-6
ICB8	B-8
ICB9	B-9
ICB11	B-11
ICB12	B-12
ICB13	B-13
ICB14	B-14
ICB15	B-15
ICB16	B-16
ICB17	B-17
ICB18	B-18
ICB19	B-19
ICB20	B-20
ICB21	B-21
ICB22	B-22
ICB23	B-23
ICB24	B-24
ICB26	B-26
ICC2	C-2
ICC3	C-3
ICC4	C-4
ICC6	C-6
ICC7	C-7
ICC8	C-8
ICC9	C-9
ICC10	C-10
ICC11	C-11
ICC12	C-12
ICC13	C-13
ICC14	C-14
ICC15	C-15
ICC16	C-16
ICC17	C-17
ICC18	C-18
ICC19	C-19
ICC20	C-20
ICC21	C-21
ICC22	C-22
ICC23	C-23
ICC24	C-24
ICC25	C-25
ICC26	C-26
ICD2	D-2
ICD3	D-3
ICD4	D-4
ICD7	D-7
ICD8	D-8
ICD9	D-9
ICD10	D-10
ICD11	D-11
ICD12	D-12
ICD13	D-13
ICD14	D-14
ICD15	D-15
ICD16	D-16
ICD18	D-18
ICD21	F-21
ICD23	D-23
ICD24	D-24
ICD25	D-25
ICE2	E-2
ICE3	E-3
ICE4	E-4
ICE5	E-5
ICE6	E-6
ICE7	E7
ICE8	E-8
ICE9	E-9
ICE10	E-10
ICE11	E-11
ICE12	E-12
ICE13	E-13
ICE14	E-14
ICE15	E-15
ICE16	E-16
ICE17	E-17
ICE18	E-18
ICE23	E-23
ICE24	E-24
ICE25	E-25
ICF2	F-2
ICF3	F-3
ICF4	F-4
ICF5	F-5
ICF6	F-6
ICF7	F-7
ICF8	F-8
ICF9	F-9
ICF10	F-10
ICF11	F-11
ICF12	F-12
ICF13	F-13
ICF14	F-14
ICF15	F-15
ICF16	F-16
ICF17	F-17
ICF19	F-19
ICF20	F-20
ICF21	F-21
ICF22	F-22
ICF23	F-23
ICF24	F-24
ICF25	F-25
ICG2	G-2
ICG3	G-3
ICG4	G-4
ICG5	G-5
ICG6	G-6
ICG7	G-7
ICG8	G-8
ICG9	G-9
ICG10	G-10
ICG11	G-11
ICG12	G12
ICG13	G-13
ICG14	G-14
ICG15	G-15
ICG17	G-17
ICG18	G-18
ICG19	G-19
ICG20	G-20
ICG21	G-21
ICG23	G-23
ICG25	G-25
ICG26	G-26
ICH1	H-1
ICH2	H-2
ICH3	H-3
ICH4	H-4
ICH6	H-6
ICH8	H-9
ICH10	H-10
ICH13	H-13
ICH15	H-15
ICH16	H-16
ICH18	H-18
ICH21	H-21
ICH23	H-23
ICH25	H-25
ICH26	H-26
ICJ1	J-1
ICJ2	J-2
ICJ3	J-3
ICJ4	J-4
ICJ5	J-5
ICJ6	J-6
ICJ7	J-7
ICJ8	J-9
ICJ10	J-10
ICJ13	J-13
ICJ15	J-15
ICJ20	J-20
ICJ21	J-21
ICJ23	J-23
ICJ25	J25
ICJ26	J-26
RB3	F-17
RB4	F-26
RB5	G-27
RB6	E-27
RB7	D-26
RB8	E-26
RB9	F-17
RB10	F-26
RB11	G-27
RB12	E-27
RB13	H-27
RB14	E-25
RB15	D-25
RB16	E-27
RB17	H-27
RB20	H-16
RB21	H-16
RB22	D-1
RB23	G-1
RB24	J-5
RB25	J-5
RB26	B-25
RV-1	C-1
S1	H-20
S2	D-1
S4	G-1
S5	E-9
S6	D-6
S7	D-17
S8	J-4
S14	B-1
S15	C-1
S16	D-1
S17	E-1
S18	F-1
S19	G-1
S20	H-14
TP3	G-20
TP4	F-18
TP5	F-18
TP6	G-18
TP7	D-19
TP8	F-17
TP9	D-17
TP10	D-20
TP11	D-21
TP12	E-19
TP13	E-19
TP14	D-19
TP15	D-19
TP16	F-14
TP17	E-10
TP18	E-5
TP19	D-18
TP20	E-16
TP21	G-7
TP22	D-15
TP23	D-16
TP24	D-14
TP25	G-7
TP26	F-12
TP27	C-9
TP28	C-8
TP29	D-10
TP30	D-9



DEC-47/P; DEMODULATOR

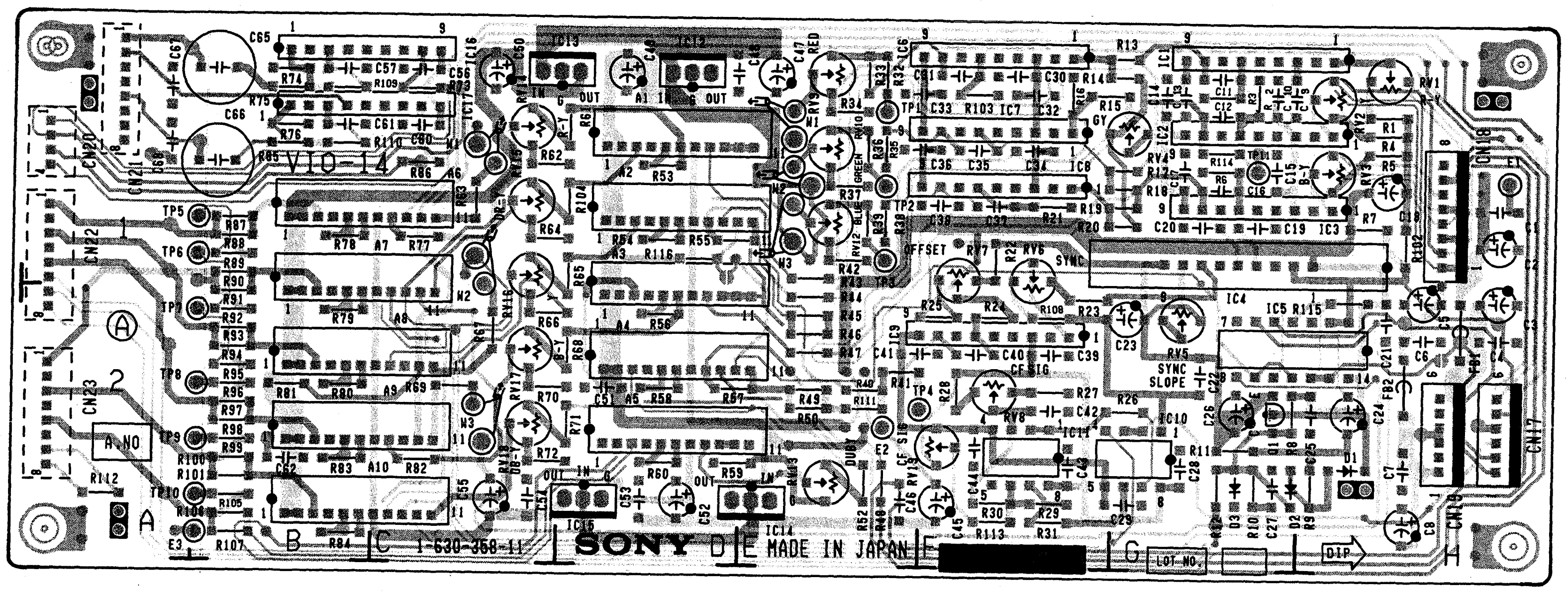

SONY MADE IN JAPAN DEC-47 1-630-356-11 Ⓐ
PHASE PRESET
PRESET MANUAL
VIDEO SHIFT
VIDEO PHASE
HUE LSB
HUE MSB
FREEZE
FIELD/FRAME
SC PLL FILTER CONT
VISC PH.H
VISC PH.L
DIP
CN3
CN2
LOT.NO
A-NO

DEC-47/P —COMPONENT SIDE—
1-630-356-11(1)
BVX-100/100P

VIO-14/P ; ANALOGUE INPUT/OUTPUT
VA-84

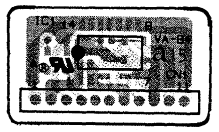
VIO-4/P(1-630-358-11)

CN17	H-2
CN18	H-1
CN19	H-1
CN20	A-1
CN21	A-1
CN22	A-1
CN23	A-2
D1	H-2
D2	G-2
D3	G-2
E1	H-1
E2	E-2
IC1	G-1
IC2	G-1
IC3	G-1
IC4	G-1
IC5	G-2
IC6	F-1
IC7	F-1
IC8	F-1
IC9	F-2
IC10	G-2
IC11	F-2
IC12	D-1
IC13	C-1
IC14	E-2
IC15	D-2
IC16	C-1
IC17	C-1
Q1	G-2
RV1	H-1
RV2	H-1
RV3	H-1
RV4	G-1
RV5	G-2
RV6	F-1
RV7	F-1
RV8	F-2
RV9	E-1
RV10	E-1
RV12	E-1
RV13	E-2
RV14	C-1
RV15	C-1
RV16	C-1
RV17	C-2
RV18	C-2
RV19	F-2
TP1	E-1
TP2	E-1
TP3	E-1
TP5	B-1
TP6	B-1
TP7	B-2
TP8	B-2
TP9	B-2
TP10	B-2
TP11	G-1


VIO-14
1-630-358-11
SONY
MADE IN JAPAN
LOT NO.
OFFSET
SYNC
SYNC SLOPE
A
B
C
D
E
G
H
CN17
CN18
CN22
CN23

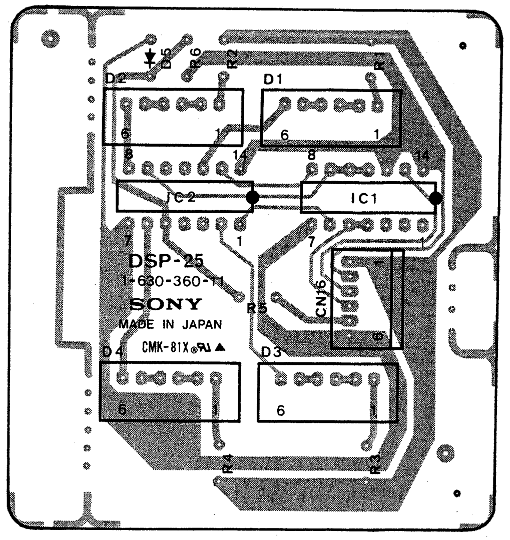
VIO-14/P —COMPONENT SIDE—
1-630-358-11(1)
BVX-100/100P

NOTE: E3 is not mounted on VIO-14/P.

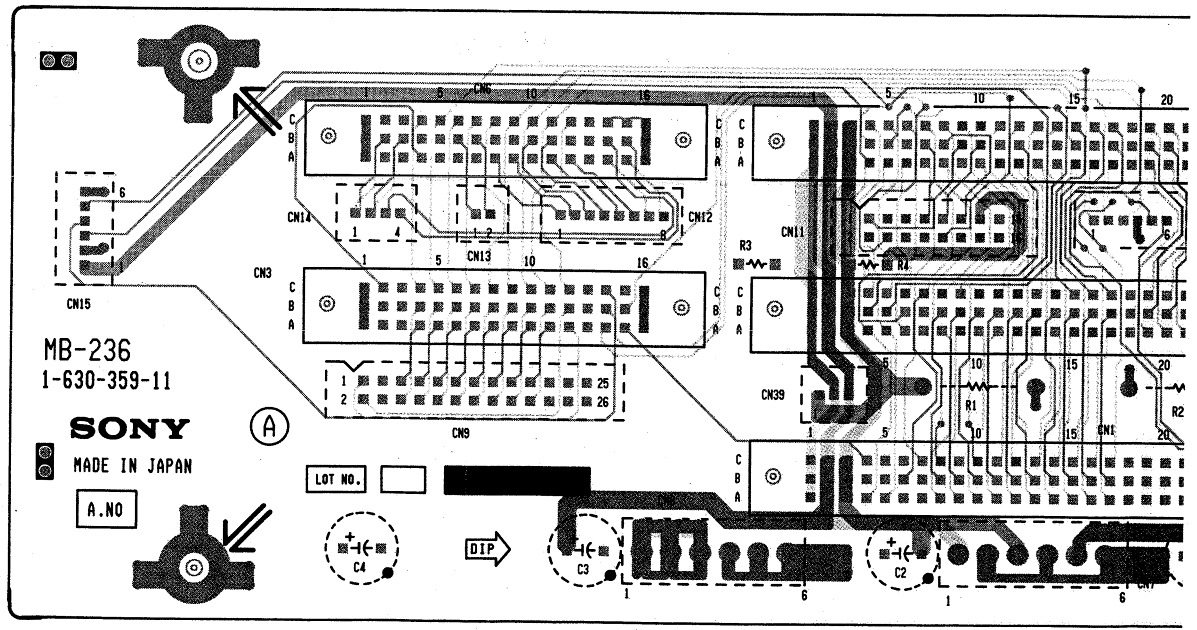


VA-84 —COMPONENT SIDE—
1-635-354-11(1)
BVX-100/100P

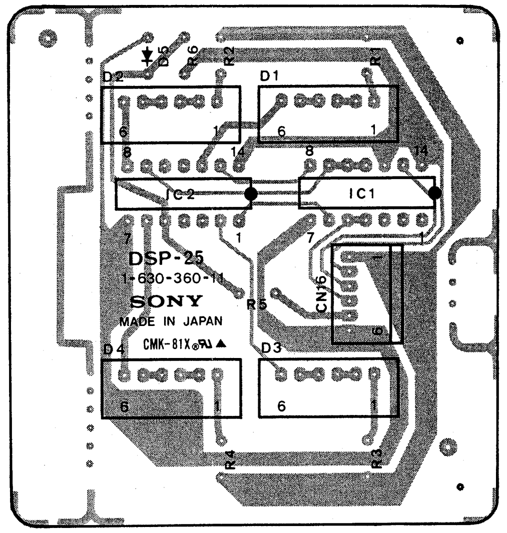
DSP-25 ; INDICATOR
SW-283B/C ; INPUT SELECTOR
MB-236 ; MOTHER BOARD


D1
D2
D3
D4
D5
R6
R12
IC1
IC2
CN16
R5
R4
R3
DSP-25
1-630-360-11
SONY
MADE IN JAPAN
CMK-81X

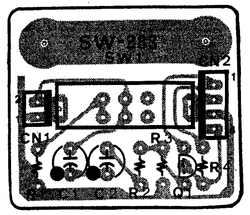
DSP-25 —COMPONENT SIDE—
1-630-360-11(1)
BVX-100/100P


MB-236
1-630-359-11
SONY
MADE IN JAPAN
A.NO
Ⓐ
LOT NO.
DIP
CN3
CN6
CN9
CN11
CN12
CN13
CN14
CN15
CN39
R1
R2
R3
R4
C2
C3
C4

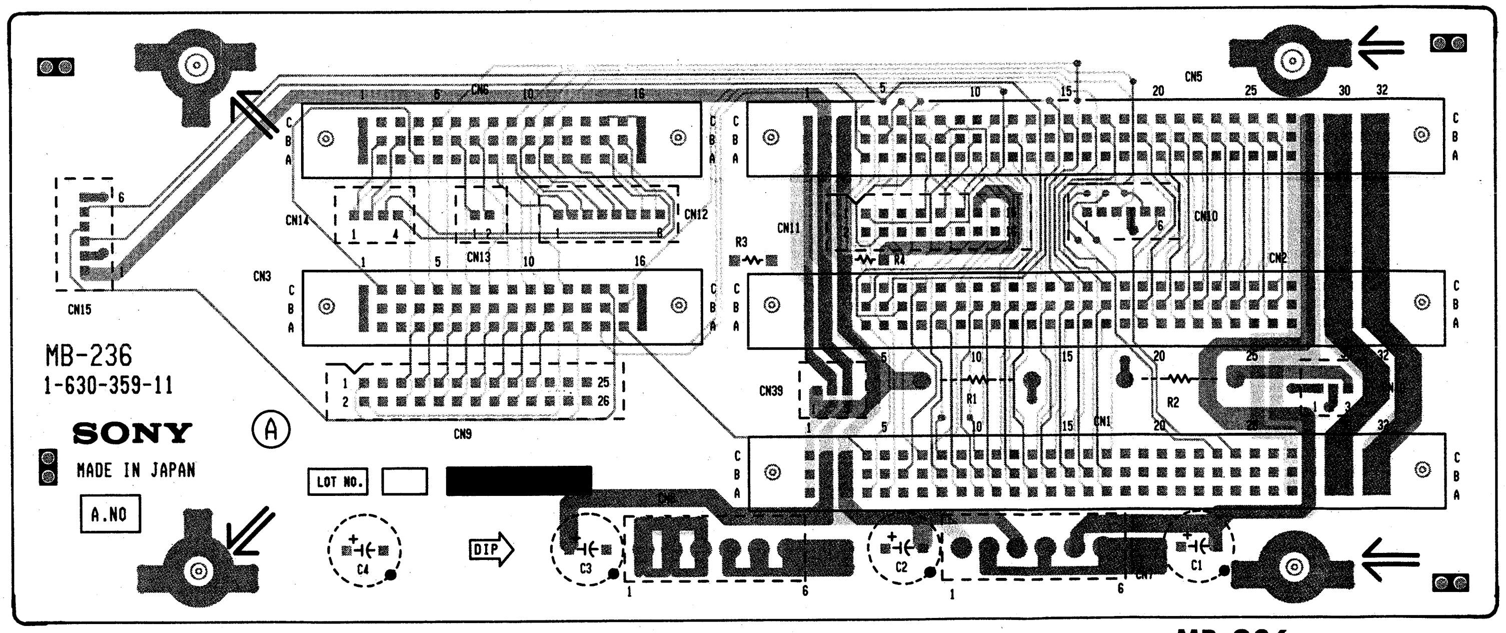
DSP-25 ; INDICATOR
SW-283B/C ; INPUT SELECTOR
MB-236 ; MOTHER BOARD


D1
D2
D3
D4
D5
IC1
IC2
CN16
R1
R2
R3
R4
R5
R6
DSP-25
1-630-360-11
SONY
MADE IN JAPAN
CMK-81X

DSP-25 —COMPONENT SIDE—
1-630-360-11(1)
BVX-100/100P

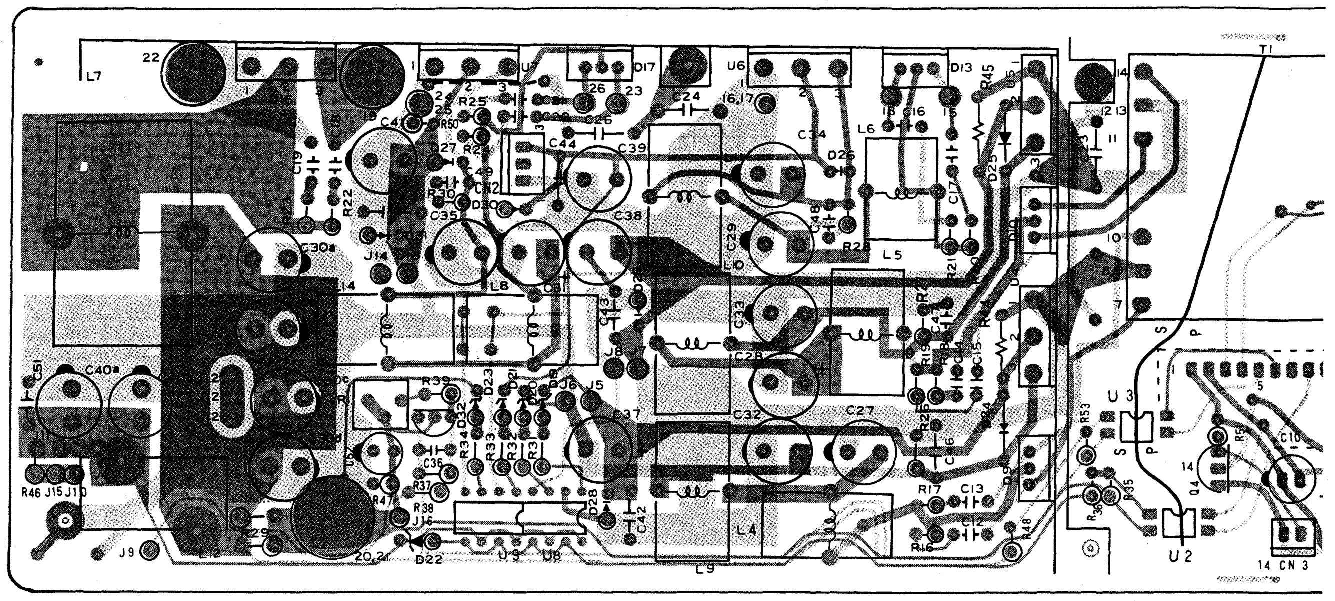

SW-283
SW1
CN1
CN2
R1
R2
R3
R4

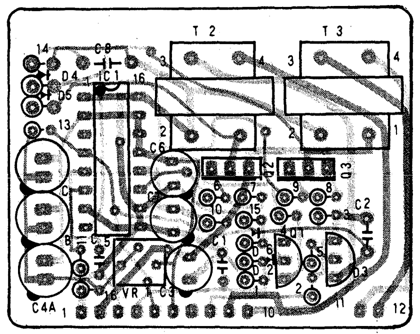
SW-283B/C —COMPONENT SIDE—
1-625-233-11(1)
BVX-100/100P


CN1
CN2
CN3
CN4
CN5
CN6
CN7
CN9
CN10
CN11
CN12
CN13
CN14
CN15
CN39
R1
R2
R3
R4
C1
C2
C3
C4
MB-236
1-630-359-11
SONY
Ⓐ
MADE IN JAPAN
A.NO
LOT NO.
DIP

MB-236 —COMPONENT SIDE—
1-630-359-11(1)
BVX-100/100P

PS-195 ; REGULATOR

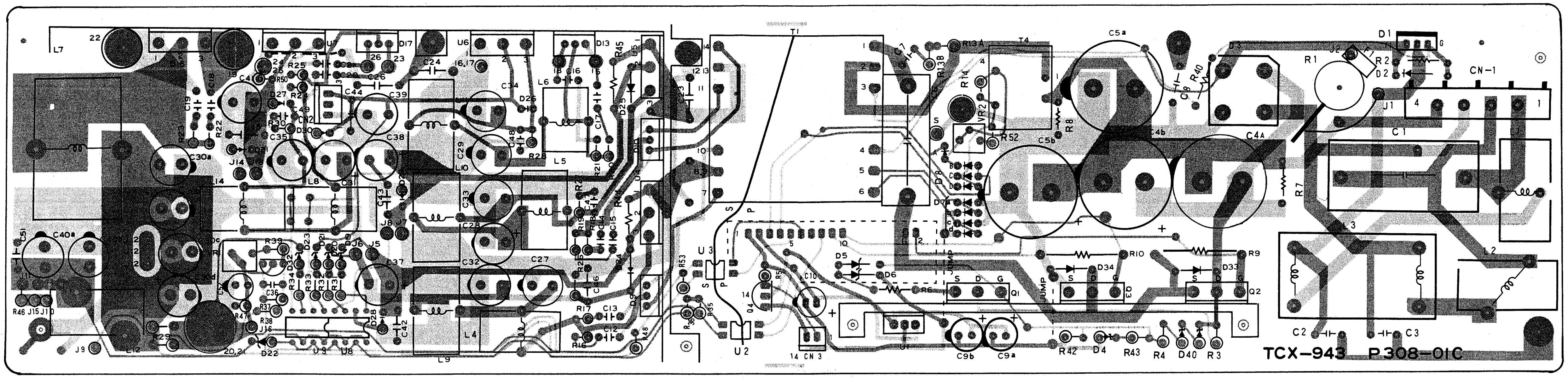

L7
22
J9
U6
D17
D13
C34
C39
C38
C29
C33
C32
C27
L4
L5
L6
L8
L9
L10
C40
C51
R46 J15 J13
D22
U5
U8
U3
U2
14 CN 3
T1


T 2
T 3
IC1
C4A
VR
C2
Q3

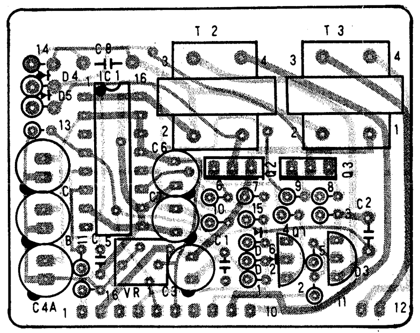
HIC-1 —COMPONENT SIDE—

BVX-100/100P

PS-195; REGULATOR

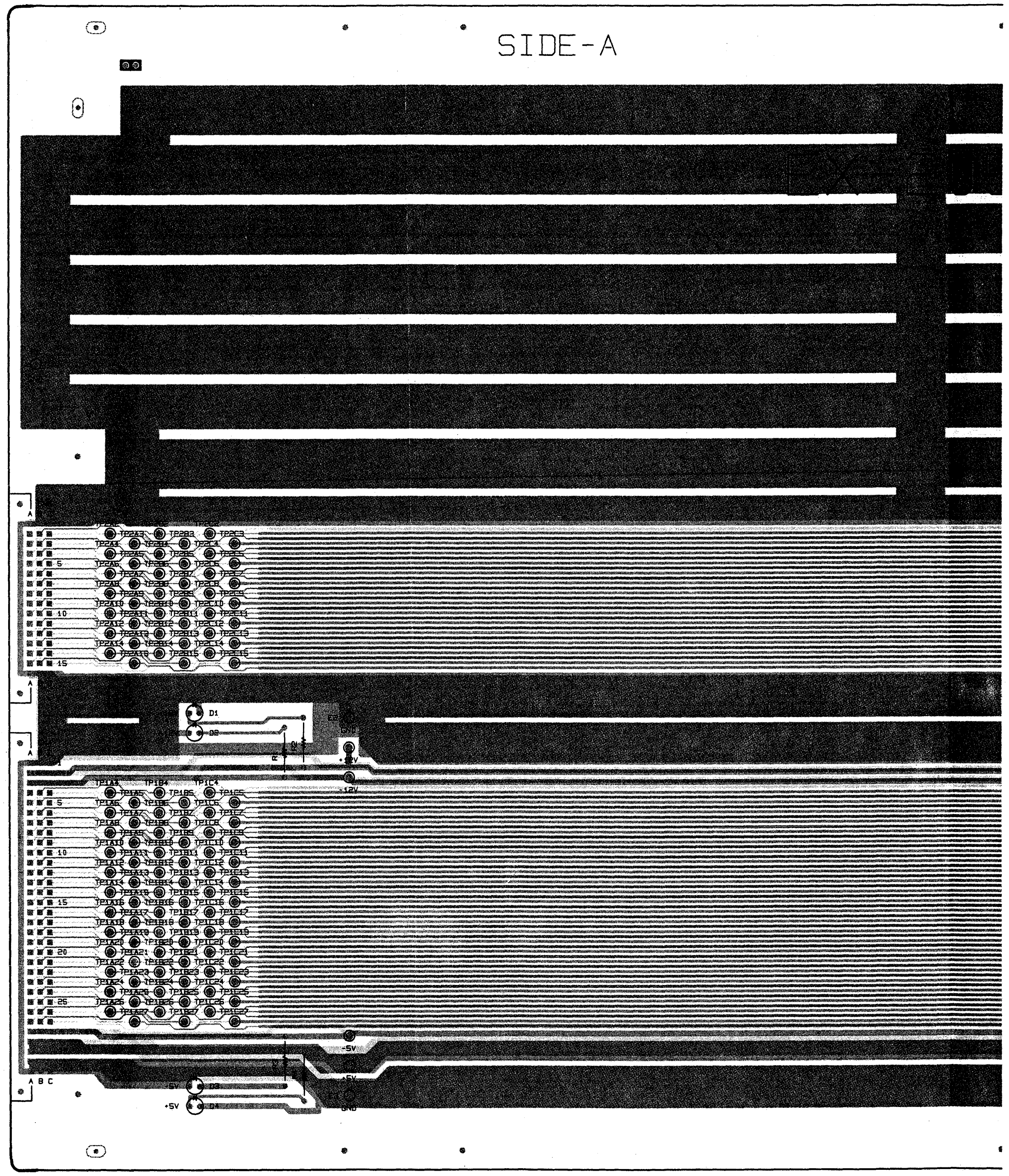

TCX-943 P308-01C

PS-195 —COMPONENT SIDE—
BVX-100/100P

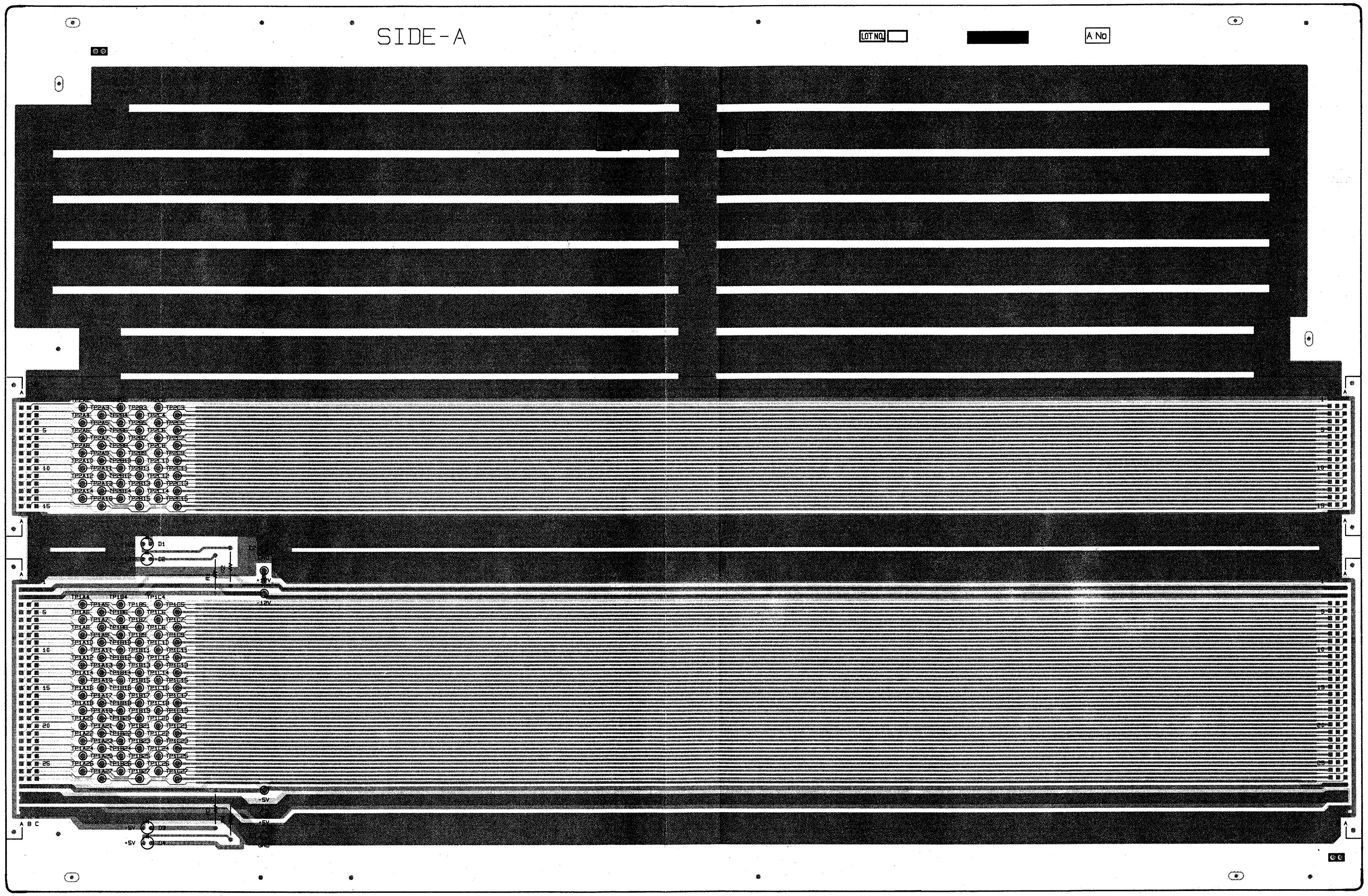


HIC-1 —COMPONENT SIDE—
BVX-100/100P

EX-205; EXTENSION BOARD

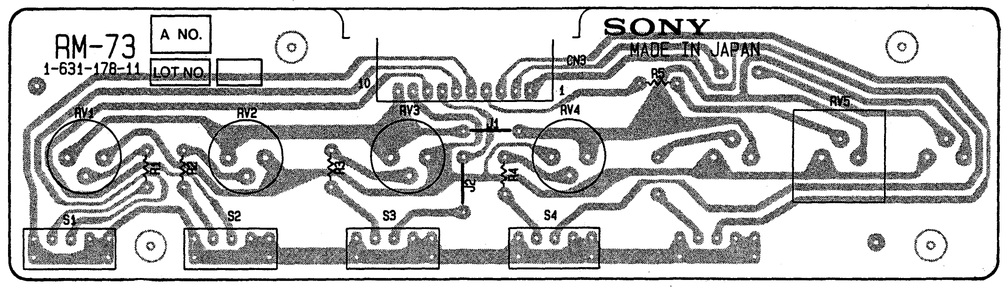

SIDE-A
D1
D2
D3
D4
R
R2
GND
+12V
-12V
-5V
+5V
TP1B4
TP1C4
5
10
15
20
25
A
B C

EX-205 ; EXTENSION BOARD

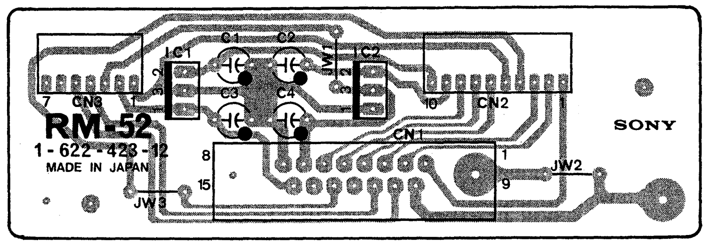

SIDE-A
LOT NO.
A No
D1
D2
+5V
-5V
+12V

EX-205 —COMPONENT SIDE—
1-630-357-11(1)
BVX-100/100P

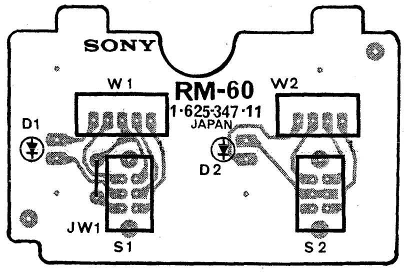
RM-73 ; REMOTE CONTROL
RM-52C ; REMOTE CONTROL
RM-60B ; REMOTE CONTROL
RM-61B ; REMOTE CONTROL


RM-73
1-631-178-11
A NO.
LOT NO.
SONY
MADE IN JAPAN
CN3
10
1
R5
RV1
RV2
RV3
RV4
RV5
S1
S2
S3
S4

RM-73 —COMPONENT SIDE—
1-631-178-11(1)
BVX-100/100P

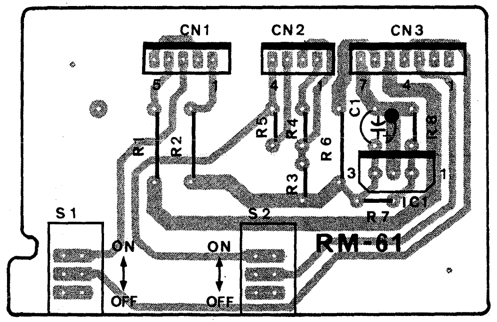

IC1
C1
C2
IC2
C3
C4
7
CN3
1
10
CN2
CN1
RM-52
1-622-423-12
MADE IN JAPAN
8
15
1
9
JW2
JW3
SONY

RM-52C —COMPONENT SIDE—
1-622-423-12(1)
BVX-100/100P


SONY
W1
RM-60
1-625-347-11
JAPAN
W2
D1
D2
JW1
S1
S2

RM-60B —COMPONENT SIDE—
1-625-347-11(1)
BVX-100/100P

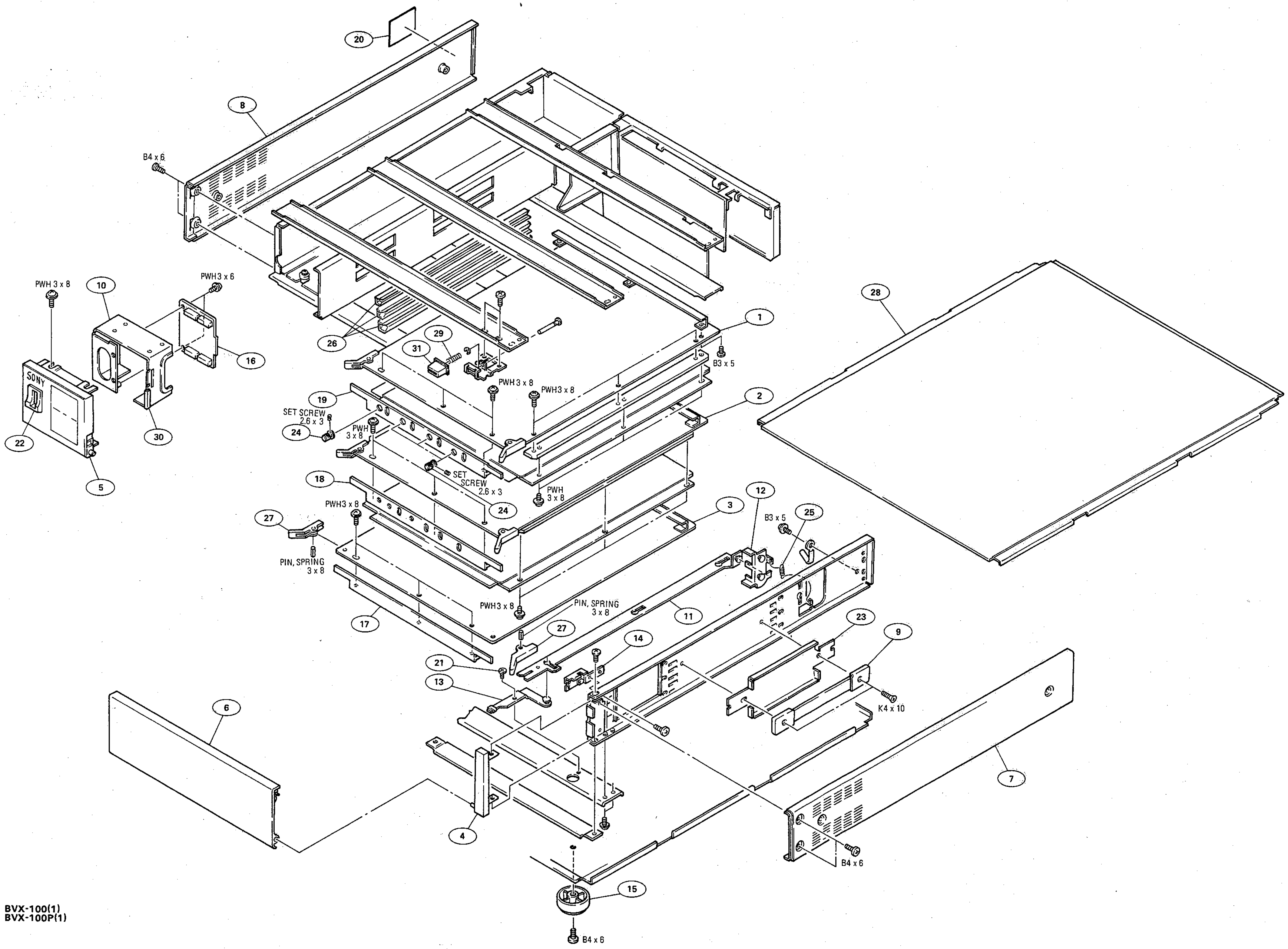
NOTE 1 : D1, JW1, S1 and W1 are not mounted on RM-60B.


CN1
CN2
CN3
R1
R2
R5
R4
R6
R3
C1
IC1
R7
S1
S2
ON
OFF
ON
OFF
RM-61

RM-61B —COMPONENT SIDE—
1-625-348-11(1)
BVX-100/100P

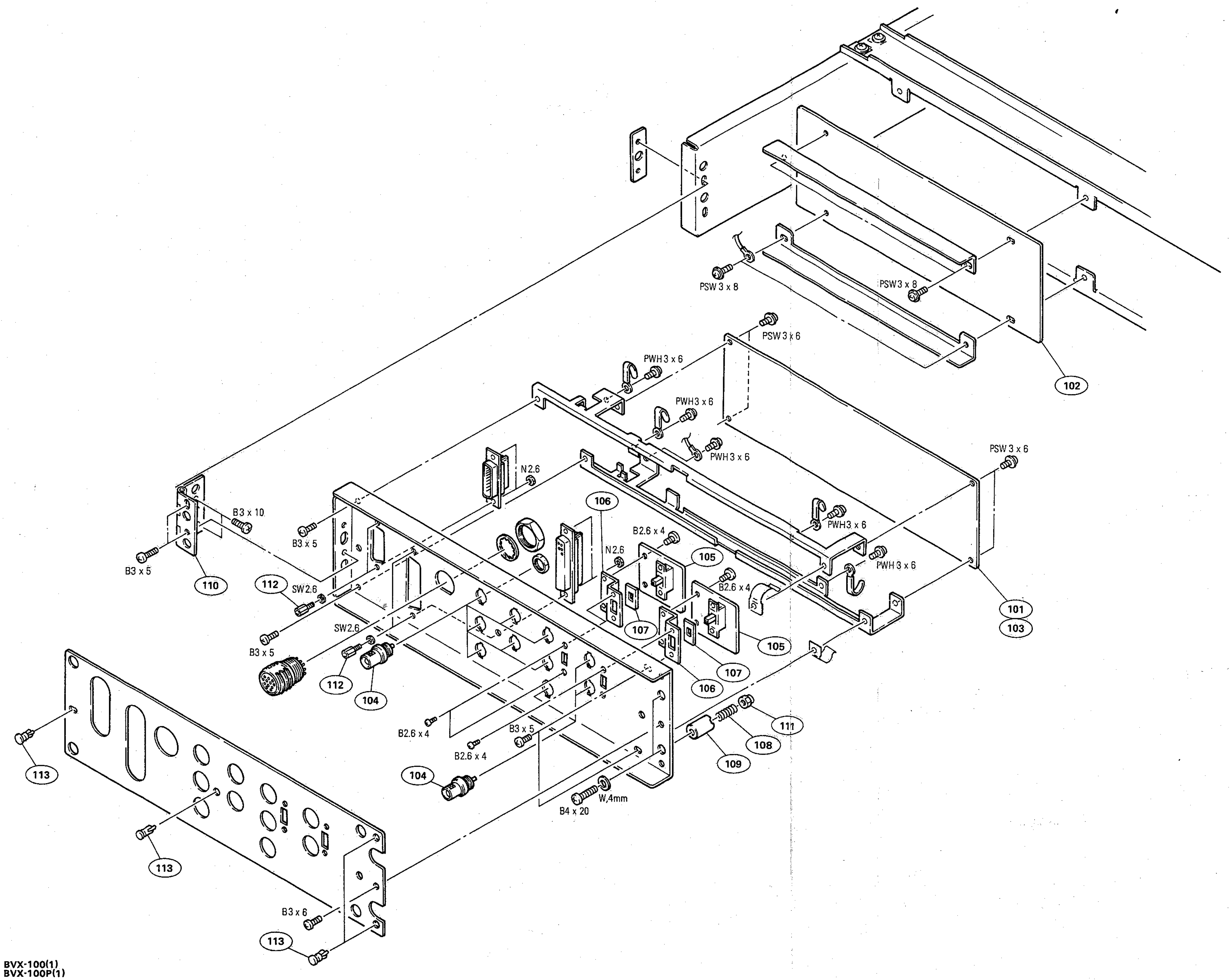
NOTE 2 : C1, R1, R2 and S1 are not mounted on RM-61B.

Chassis Assy


20
8
B4 x 6
PWH 3 x 8
10
PWH3 x 6
16
22
5
30
26
29
31
1
B3 x 5
PWH3 x 8
PWH3 x 8
19
SET SCREW 2.6 x 3
24
PWH 3 x 8
2
18
SET SCREW 2.6 x 3
PWH 3 x 8
24
PWH3 x 8
27
PIN, SPRING 3 x 8
3
12
B3 x 5
25
28
17
PWH3 x 8
PIN, SPRING 3 x 8
11
27
14
23
9
21
13
K4 x 10
6
7
4
B4 x 6
15
B4 x 6

No.	Part No.	SP	Description
1	A-6257-234-A	o	DAD-6 (FOR UC BRZ)
	A-6257-235-A	o	DAD-6P (FOR EK)
	A-6257-243-A	o	DAD-6 (FOR J)
2	A-6257-236-A	o	DED-47 (FOR UC BRZ J)
	A-6257-239-A	o	DEC-47P (FOR EK)
3	A-6257-237-A	o	SEP-3 (FOR UC BRZ J)
	A-6257-238-A	o	SEP-3P (FOR EK)
4	A-6273-260-A	o	PROTECTOR ASSY
5	A-6274-277-A	o	PANEL ASSY INDICATION
6	X-2136-601-1	o	PANEL ASSY FRONT
7	X-2136-602-1	o	PANEL RIGHT ASSY SIDE
8	X-2136-603-1	o	PANEL LEFT ASSY SIDE
9	X-2275-501-1	s	HANDLE ASSY
10	X-3673-201-2	o	BRACKET ASSY PANEL
11	X-3673-202-2	o	PLATE ASSY STOPPER
12	X-3673-203-1	o	STOPPER ASSY
13	X-3673-207-2	o	LEVER ASSY STOPPER
14	X-3673-215-4	o	BRACKET ASSY LOCK
15	X-4310-310-1	o	FOOT ASSY
16	1-630-360-11	o	DSP-25
17	2-136-606-01	o	PLATE ORNAMENTAL SEP
18	2-136-607-01	o	PLATE ORNAMENTAL DEC
19	2-136-608-01	o	PLATE ORNAMENTAL DAD
20	2-136-616-01	o	LABEL REAR PANEL
21	2-236-956-01	s	SCREW STEP
22	2-251-642-01	s	GUARD POWER SWITCH
23	2-256-630-02	o	PLATE ORNAMENTAL HAND
24	2-282-313-02	s	KNOB VR
25	3-555-121-01	o	SPRING TENSION
26	3-673-235-02	o	RAIL
27	3-673-249-01	o	LEVER PC BOARD
28	3-673-268-31	o	LID UPPER
29	3-673-281-01	o	SPRING COMPRESSION
30	3-678-515-02	o	EDGING RUBBER
31	4-335-962-02	s	PUSH BUTTON

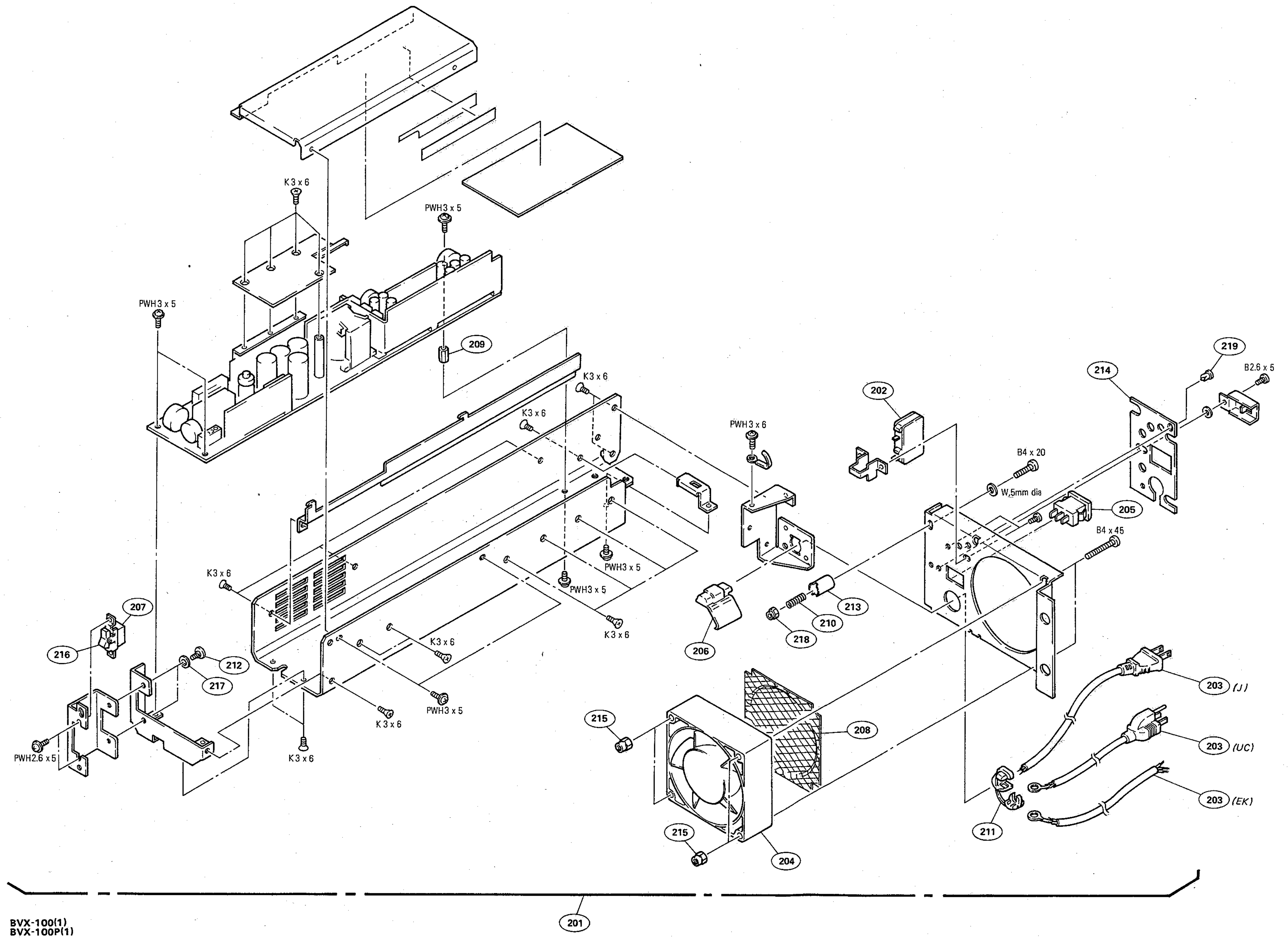
Rear Panel Assy


PSW 3 x 8
PSW3 x 8
102
PSW3 x 6
PWH3 x 6
PWH3 x 6
PWH3 x 6
PSW 3 x 6
N2.6
106
B3 x 10
B3 x 5
B3 x 5
B2.6 x 4
N2.6
105
PWH3 x 6
PWH3 x 6
110
112
SW2.6
B2.6 x 4
101
103
SW2.6
B3 x 5
107
105
112
104
107
106
111
108
109
B2.6 x 4
B3 x 5
B2.6 x 4
113
104
W,4mm
B4 x 20
113
B3 x 6
113

BVX-100(1)
BVX-100P(1)

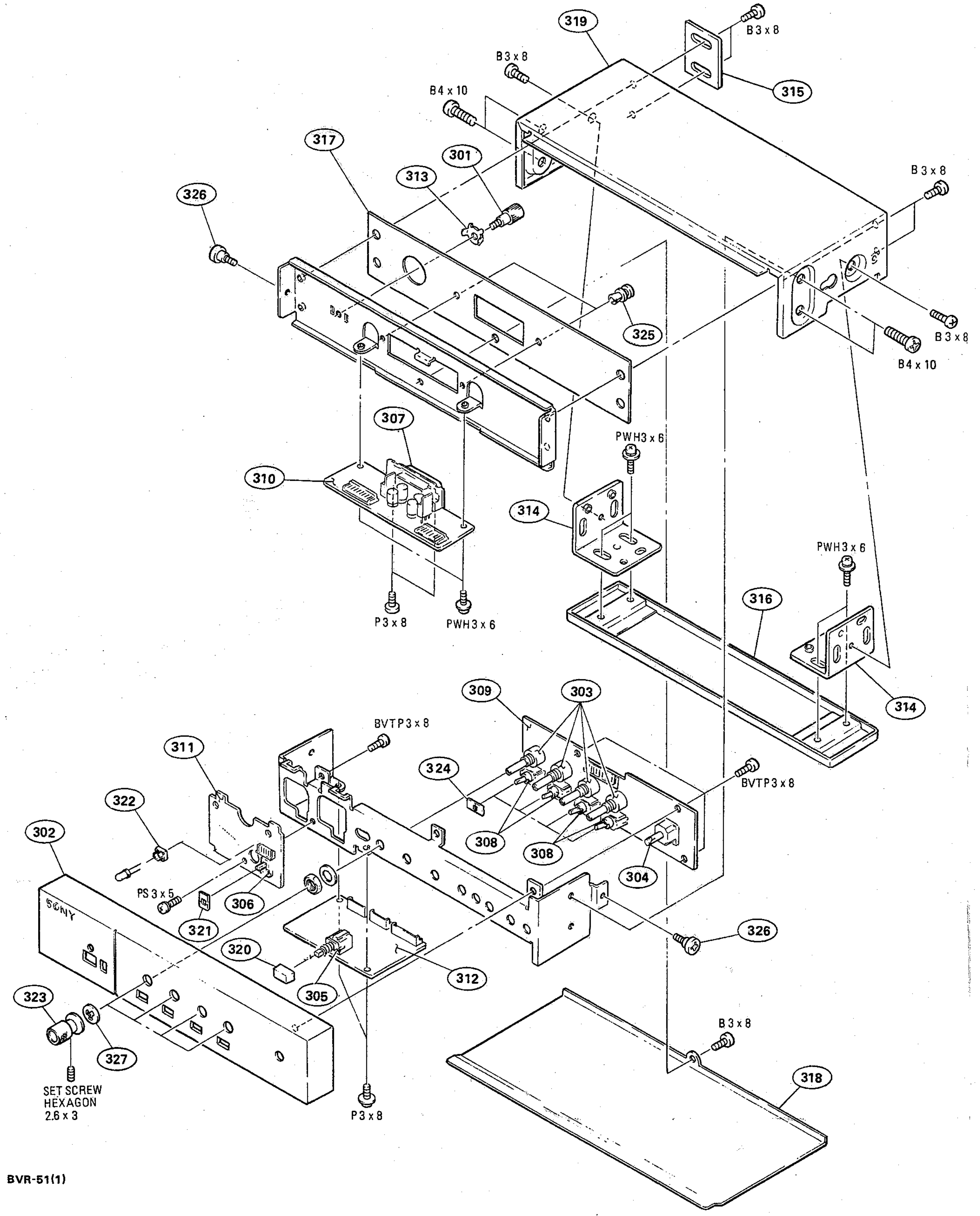
No.	Part No.	SP	Description
101	A-6257-232-A	o	MOUNTED CIRCUIT BOARD, VIO-14 (FOR
	A-6257-233-A	o	MOUNTED CIRCUIT BOARD, VIO-14P (FOR
102	A-6264-114-A	o	MB-236
103	A-6268-345-A	o	VA-84 (MOUNTED ON VIO-14/P)
104	1-561-781-21	s	BNC RECEPTACLE
105	1-625-233-11	o	PRINTED CIRCUIT BOARD, SW-283
106	2-124-625-01	o	BRACKET SWITCH
107	2-124-626-01	o	CUSHION SW
108	3-303-890-01	s	SPRING COMPRESSION
109	3-651-849-01	o	SPACER PANEL
110	3-658-816-01	o	HINGE FRONT
111	3-680-316-01	s	NUT M4 STOPPER
112	3-717-327-01	o	SCREW 9P CONNECTOR
113	4-812-134-11	s	RIVET NYRON 3.5

Power Supply Assy


K3 x 6
PWH3 x 5
PWH3 x 5
209
K3 x 6
K3 x 6
202
PWH3 x 6
219
B2.6 x 5
214
B4 x 20
W,5mm dia
205
B4 x 45
PWH3 x 5
PWH3 x 5
K3 x 6
K3 x 6
207
216
212
217
K3 x 6
PWH3 x 5
K3 x 6
PWH2.6 x 5
K3 x 6
213
210
218
206
215
208
203 (J)
203 (UC)
203 (EK)
211
215
204
201

No.	Part No.	SP	Description
201	⚠1-413-455-11	s	SWITCHING POWER (FOR UC BRZ)
	⚠1-413-456-11	s	SWITCHING POWER (FOR EK)
	⚠1-413-457-11	s	SWITCHING POWER (FOR J)
202	⚠1-532-534-31	s	BREAKER, CIRCUIT (FOR EK)
	⚠1-532-543-31	s	BREAKER, CIRCUIT (FOR UC BRZ J)
203	⚠1-534-517-81	s	CORD, POWER (FOR UC BRZ)
	⚠1-534-535-25	s	CORD, POWER (FOR J)
	⚠1-556-559-31	s	CORD, POWER 3 CORE (FOR EK)
204	1-541-170-31	s	FAN, DC
205	⚠1-554-011-11	s	SWITCH, ROCKER AC
206	⚠1-563-112-11	o	CONNECTOR DIVERGE
207	⚠1-570-117-31	s	ROCKER, AC POWER
208	2-252-609-01	o	COVER, FAN
209	2-280-622-11	s	SUPPORT, M3 FEXAGON
210	3-303-890-01	s	SPRING COMPRESSION
211	⚠3-649-728-01	s	STOPPER, CORD (FOR UC BRZ)
	⚠3-673-298-01	s	STOPPER, CORD (FOR EK)
	⚠2-234-904-01	s	BUSHING, CORD (FOR J)
212	3-630-415-01	s	SCREW STEP M3
213	3-651-849-01	o	SPACER, PANEL
214	3-673-211-02	o	LABEL, REAR PANEL, RIGHT
215	3-680-316-01	s	NUT, M4 STOPPER
216	3-688-814-11	s	CAP, SWITCH
217	3-701-443-21	s	WASHER 5 DIA.
218	3-703-347-11	s	NUT, M4 PRESS
219	4-812-134-11	s	RIVET, NYRON 3.5

BVR-51


319
B3x8
315
B3x8
B4x10
317
301
313
326
B3x8
325
B3x8
B4x10
307
PWH3x6
310
314
P3x8
PWH3x6
PWH3x6
316
314
309
303
BVTP3x8
311
324
BVTP3x8
322
308
308
302
304
PS3x5
306
321
326
SONY
320
312
305
323
327
SET SCREW
HEXAGON
2.6x3
P3x8
B3x8
318

BVR-51(1)

No.	Part No.	SP	Description
301	X-2068-004-0	s	TERMINAL ASSY
302	X-2124-625-1	o	PANEL ASSY, FRONT
303	1-237-727-11	s	VAR CARBON 5K
304	1-237-728-11	s	VAR CEMENT 5K
305	1-554-824-11	s	SWITCH, PUSH
306	1-570-331-11	s	SWITCH, SLIDE
307	1-563-771-11	s	SOCKET, D-SUB CONNECTOR 15P
308	1-571-095-11	s	SWITCH, TOGGLE
309	1-622-422-11	o	PRINTED CIRCUIT BOARD, RM-51
310	1-622-423-12	o	PRINTED CIRCUIT BOARD, RM-52
311	1-625-348-11	o	PRINTED CIRCUIT BOARD, RM-61
312	1-631-178-11	o	PRINTED CIRCUIT BOARD, RM-73
313	2-068-008-00	s	WASHER
314	2-124-603-01	o	BRACKET, BLANK
315	2-124-604-01	o	JOINT
316	2-124-605-01	o	PANEL, BLANK
317	2-124-606-01	o	PANEL, CONNECTOR
318	2-124-607-01	o	PLATE, BOTTOM
319	2-124-610-01	o	CASE
320	2-124-653-01	o	PUSH BUTTON
321	2-124-654-01	o	SHEET, SW
322	2-124-656-01	o	HOLDER, LED
323	2-282-313-11	s	KNOB, VR
324	2-360-735-00	o	PLATE, SWITCH
325	3-531-576-01	s	RIVET
326	3-613-164-21	o	SHAFT, STEP
327	3-650-537-00	o	WASHER

9-3. ELECTRICAL PARTS LIST (BVX-100/100P)

General Purpose Electrical Parts List

Parts that are not listed in the "reference number order list" are shown in following list.
Reference numbers are omitted.

CAPACITOR, CERAMIC, SBL

Part No.	SP	Description
1-161-039-00	s	CAP, CERAMIC 0.001 10% 50V
1-161-041-00	s	CAP, CERAMIC 0.0015 10% 50V
1-161-043-00	s	CAP, CERAMIC 0.0022 10% 50V
1-161-045-00	s	CAP, CERAMIC 0.0033 10% 50V
1-161-047-00	s	CAP, CERAMIC 0.0047 10% 50V
1-161-049-00	s	CAP, CERAMIC 0.0068 10% 50V
1-161-051-00	s	CAP, CERAMIC 0.01 10% 50V
1-161-053-00	s	CAP, CERAMIC 0.015 10% 50V
1-161-055-00	s	CAP, CERAMIC 0.022 10% 50V
1-161-057-00	s	CAP, CERAMIC 0.033 10% 50V
1-161-021-11	s	CAP, CERAMIC 0.047 10% 25V
1-161-059-00	s	CAP, CERAMIC 0.047 10% 50V
1-161-061-00	s	CAP, CERAMIC 0.068 10% 50V
1-161-772-11	s	CAP, CERAMIC 0.1 10% 25V
1-161-063-00	s	CAP, CERAMIC 0.1 10% 50V

CAPACITOR, ELECTROLYTIC

Part No.	SP	Description
1-124-902-00	s	CAP, ELECT 0.47 20% 50V
1-124-791-11	s	CAP, ELECT 1.0 20% 100V
1-124-925-11	s	CAP, ELECT 2.2 20% 100V
1-123-382-00	s	CAP, ELECT 3.3 20% 100V
1-124-927-00	s	CAP, ELECT 4.7 20% 100V
1-123-875-91	s	CAP, ELECT 10 20% 50V
1-124-915-11	s	CAP, ELECT 10 20% 63V
1-124-667-11	s	CAP, ELECT 10 20% 100V
1-124-908-11	s	CAP, ELECT 22 20% 50V
1-124-916-11	s	CAP, ELECT 22 20% 63V
1-124-929-11	s	CAP, ELECT 22 20% 100V
1-124-963-11	s	CAP, ELECT 33 20% 16V
1-124-482-11	s	CAP, ELECT 33 20% 35V
1-124-917-11	s	CAP, ELECT 33 20% 63V
1-124-930-11	s	CAP, ELECT 33 20% 100V
1-124-446-11	s	CAP, ELECT 47 20% 10V
1-124-477-11	s	CAP, ELECT 47 20% 25V
1-124-910-11	s	CAP, ELECT 47 20% 50V
1-124-918-11	s	CAP, ELECT 47 20% 63V
1-124-931-11	s	CAP, ELECT 47 20% 100V
1-124-443-00	s	CAP, ELECT 100 20% 10V
1-126-101-11	s	CAP, ELECT 100 20% 16V
1-124-478-11	s	CAP, ELECT 100 20% 25V
1-124-122-11	s	CAP, ELECT 100 20% 50V
1-124-572-11	s	CAP, ELECT 100 20% 63V

CAPACITOR, ELECTROLYTIC

Part No.	SP	Description
1-123-605-00	s	CAP, ELECT 100 20% 100V
1-124-444-00	s	CAP, ELECT 220 20% 10V
1-124-120-11	s	CAP, ELECT 220 20% 25V
1-124-484-11	s	CAP, ELECT 220 20% 35V
1-124-911-11	s	CAP, ELECT 220 20% 50V
1-124-919-51	s	CAP, ELECT 220 20% 63V
1-124-628-11	s	CAP, ELECT 220 20% 100V
1-124-442-00	s	CAP, ELECT 330 20% 6.3V
1-124-604-00	s	CAP, ELECT 330 20% 10V
1-124-119-00	s	CAP, ELECT 330 20% 16V
1-124-479-11	s	CAP, ELECT 330 20% 25V
1-124-485-11	s	CAP, ELECT 330 20% 35V
1-124-912-11	s	CAP, ELECT 330 20% 50V
1-124-472-11	s	CAP, ELECT 470 20% 10V
1-124-475-11	s	CAP, ELECT 470 20% 16V
1-124-480-11	s	CAP, ELECT 470 20% 25V
1-126-104-11	s	CAP, ELECT 470 20% 35V
1-124-913-11	s	CAP, ELECT 470 20% 50V
1-124-921-11	s	CAP, ELECT 470 20% 63V
1-124-471-00	s	CAP, ELECT 1000 20% 6.3V
1-124-473-11	s	CAP, ELECT 1000 20% 10V
1-124-555-00	s	CAP, ELECT 1000 20% 16V
1-124-557-11	s	CAP, ELECT 1000 20% 25V
1-126-105-11	s	CAP, ELECT 1000 20% 35V
1-124-637-11	s	CAP, ELECT 1000 20% 50V
1-124-922-11	s	CAP, ELECT 1000 20% 63V
1-124-893-11	s	CAP, ELECT 2200 20% 10V
1-124-556-11	s	CAP, ELECT 2200 20% 16V
1-124-563-11	s	CAP, ELECT 2200 20% 25V
1-124-618-11	s	CAP, ELECT 2200 20% 35V
1-124-607-11	s	CAP, ELECT 2200 20% 50V
1-124-621-11	s	CAP, ELECT 3300 20% 6.3V
1-124-887-00	s	CAP, ELECT 3300 20% 16V
1-124-636-00	s	CAP, ELECT 3300 20% 25V
1-124-762-00	s	CAP, ELECT 4700 20% 10V

(CAPACITOR, ELECTROLYTIC)

Part No.	SP	Description
1-124-898-11	s	CAP, ELECT 4700 20% 16V
1-124-564-11	s	CAP, ELECT 4700 20% 25V
1-124-891-11	s	CAP, ELECT 10000 20% 6.3V
1-124-763-00	s	CAP, ELECT 10000 20% 10V
1-124-902-00	s	CAP, ELECT 0.47 20% 50V
1-124-791-11	s	CAP, ELECT 1.0 20% 100V
1-124-925-11	s	CAP, ELECT 2.2 20% 100V
1-123-382-00	s	CAP, ELECT 3.3 20% 100V
1-124-927-00	s	CAP, ELECT 4.7 20% 100V
1-123-875-91	s	CAP, ELECT 10 20% 50V
1-124-908-11	s	CAP, ELECT 22 20% 50V
1-124-963-11	s	CAP, ELECT 33 20% 16V
1-124-482-11	s	CAP, ELECT 33 20% 35V
1-124-917-11	s	CAP, ELECT 33 20% 63V
1-124-446-11	s	CAP, ELECT 47 20% 10V
1-124-477-11	s	CAP, ELECT 47 20% 25V
1-124-910-11	s	CAP, ELECT 47 20% 50V
1-124-443-00	s	CAP, ELECT 100 20% 10V
1-126-101-11	s	CAP, ELECT 100 20% 16V
1-124-478-11	s	CAP, ELECT 100 20% 25V
1-124-122-11	s	CAP, ELECT 100 20% 50V
1-124-444-00	s	CAP, ELECT 220 20% 10V
1-124-120-11	s	CAP, ELECT 220 20% 25V
1-124-484-11	s	CAP, ELECT 220 20% 35V
1-124-911-11	s	CAP, ELECT 220 20% 50V
1-124-442-00	s	CAP, ELECT 330 20% 6.3V
1-124-604-00	s	CAP, ELECT 330 20% 10V
1-124-119-00	s	CAP, ELECT 330 20% 16V
1-124-479-11	s	CAP, ELECT 330 20% 25V
1-124-485-11	s	CAP, ELECT 330 20% 35V
1-124-912-11	s	CAP, ELECT 330 20% 50V
1-124-472-11	s	CAP, ELECT 470 20% 10V
1-124-475-11	s	CAP, ELECT 470 20% 16V
1-124-480-11	s	CAP, ELECT 470 20% 25V
1-126-104-11	s	CAP, ELECT 470 20% 35V
1-124-913-11	s	CAP, ELECT 470 20% 50V

RESISTOR, METAL

Part No.	SP	Description
1-215-373-31	s	RES, METAL 10 1% 1/6W
1-215-374-00	s	RES, METAL 11 1% 1/6W
1-215-375-00	s	RES, METAL 12 1% 1/6W
1-215-376-00	s	RES, METAL 13 1% 1/6W
1-215-377-00	s	RES, METAL 15 1% 1/6W
1-215-378-00	s	RES, METAL 16 1% 1/6W
1-215-379-00	s	RES, METAL 18 1% 1/6W
1-215-380-00	s	RES, METAL 20 1% 1/6W
1-215-381-00	s	RES, METAL 22 1% 1/6W
1-215-382-00	s	RES, METAL 24 1% 1/6W
1-215-383-00	s	RES, METAL 27 1% 1/6W
1-215-384-00	s	RES, METAL 30 1% 1/6W
1-215-385-00	s	RES, METAL 33 1% 1/6W
1-215-386-00	s	RES, METAL 36 1% 1/6W
1-215-387-00	s	RES, METAL 39 1% 1/6W
1-215-388-00	s	RES, METAL 43 1% 1/6W
1-215-389-00	s	RES, METAL 47 1% 1/6W
1-215-390-00	s	RES, METAL 51 1% 1/6W
1-215-391-00	s	RES, METAL 56 1% 1/6W
1-215-392-00	s	RES, METAL 62 1% 1/6W
1-215-393-00	s	RES, METAL 68 1% 1/6W
1-215-394-00	s	RES, METAL 75 1% 1/6W
1-215-395-00	s	RES, METAL 82 1% 1/6W
1-215-396-00	s	RES, METAL 91 1% 1/6W
1-215-397-00	s	RES, METAL 100 1% 1/6W
1-215-398-00	s	RES, METAL 110 1% 1/6W
1-215-399-00	s	RES, METAL 120 1% 1/6W
1-215-400-00	s	RES, METAL 130 1% 1/6W
1-215-401-00	s	RES, METAL 150 1% 1/6W
1-215-402-00	s	RES, METAL 160 1% 1/6W
1-215-403-00	s	RES, METAL 180 1% 1/6W
1-215-404-00	s	RES, METAL 200 1% 1/6W
1-215-405-00	s	RES, METAL 220 1% 1/6W
1-215-406-00	s	RES, METAL 240 1% 1/6W
1-215-407-00	s	RES, METAL 270 1% 1/6W
1-215-408-00	s	RES, METAL 300 1% 1/6W
1-215-409-00	s	RES, METAL 330 1% 1/6W
1-215-410-00	s	RES, METAL 360 1% 1/6W
1-215-411-00	s	RES, METAL 390 1% 1/6W
1-215-412-00	s	RES, METAL 430 1% 1/6W
1-215-413-00	s	RES, METAL 470 1% 1/6W
1-215-414-00	s	RES, METAL 510 1% 1/6W
1-215-415-00	s	RES, METAL 560 1% 1/6W
1-215-416-00	s	RES, METAL 620 1% 1/6W
1-215-417-00	s	RES, METAL 680 1% 1/6W
1-215-418-00	s	RES, METAL 750 1% 1/6W
1-215-419-00	s	RES, METAL 820 1% 1/6W
1-215-420-00	s	RES, METAL 910 1% 1/6W
1-215-421-00	s	RES, METAL 1.0k 1% 1/6W
1-215-422-00	s	RES, METAL 1.1k 1% 1/6W
1-215-423-00	s	RES, METAL 1.2k 1% 1/6W
1-215-424-00	s	RES, METAL 1.3k 1% 1/6W
1-215-425-00	s	RES, METAL 1.5k 1% 1/6W
1-215-426-00	s	RES, METAL 1.6k 1% 1/6W
1-215-427-00	s	RES, METAL 1.8k 1% 1/6W
1-215-428-00	s	RES, METAL 2.0k 1% 1/6W
1-215-429-00	s	RES, METAL 2.2k 1% 1/6W
1-215-430-00	s	RES, METAL 2.4k 1% 1/6W
1-215-431-00	s	RES, METAL 2.7k 1% 1/6W
1-215-432-00	s	RES, METAL 3.0k 1% 1/6W

(RESISTOR, METAL)

Part No.	SP	Description
1-215-433-00	s	RES, METAL 3.3k 1% 1/6W
1-215-434-00	s	RES, METAL 3.6k 1% 1/6W
1-215-435-00	s	RES, METAL 3.9k 1% 1/6W
1-215-436-00	s	RES, METAL 4.3k 1% 1/6W
1-215-437-00	s	RES, METAL 4.7k 1% 1/6W
1-215-438-00	s	RES, METAL 5.1k 1% 1/6W
1-215-439-00	s	RES, METAL 5.6k 1% 1/6W
1-215-440-00	s	RES, METAL 6.2k 1% 1/6W
1-215-441-00	s	RES, METAL 6.8k 1% 1/6W
1-215-442-00	s	RES, METAL 7.5k 1% 1/6W
1-215-443-00	s	RES, METAL 8.2k 1% 1/6W
1-215-444-00	s	RES, METAL 9.1k 1% 1/6W
1-215-445-00	s	RES, METAL 10k 1% 1/6W
1-215-446-00	s	RES, METAL 11k 1% 1/6W
1-215-447-00	s	RES, METAL 12k 1% 1/6W
1-215-448-00	s	RES, METAL 13k 1% 1/6W
1-215-449-00	s	RES, METAL 15k 1% 1/6W
1-215-450-00	s	RES, METAL 16k 1% 1/6W
1-215-451-00	s	RES, METAL 18k 1% 1/6W
1-215-452-00	s	RES, METAL 20k 1% 1/6W
1-215-453-00	s	RES, METAL 22k 1% 1/6W
1-215-454-00	s	RES, METAL 24k 1% 1/6W
1-215-455-00	s	RES, METAL 27k 1% 1/6W
1-215-456-00	s	RES, METAL 30k 1% 1/6W
1-215-457-00	s	RES, METAL 33k 1% 1/6W
1-215-458-00	s	RES, METAL 36k 1% 1/6W
1-215-459-00	s	RES, METAL 39k 1% 1/6W
1-215-460-00	s	RES, METAL 43k 1% 1/6W
1-215-461-00	s	RES, METAL 47k 1% 1/6W
1-215-462-00	s	RES, METAL 51k 1% 1/6W
1-215-463-00	s	RES, METAL 56k 1% 1/6W
1-215-464-00	s	RES, METAL 62k 1% 1/6W
1-215-465-00	s	RES, METAL 68k 1% 1/6W
1-215-466-00	s	RES, METAL 75k 1% 1/6W
1-215-467-00	s	RES, METAL 82k 1% 1/6W
1-215-468-00	s	RES, METAL 91k 1% 1/6W
-215-469-00	s	RES, METAL 100k 1% 1/6W
1-215-470-00	s	RES, METAL 110k 1% 1/6W
1-215-471-00	s	RES, METAL 120k 1% 1/6W
1-215-472-00	s	RES, METAL 130k 1% 1/6W
1-215-473-00	s	RES, METAL 150k 1% 1/6W
1-215-474-00	s	RES, METAL 160k 1% 1/6W
1-215-475-00	s	RES, METAL 180k 1% 1/6W
1-215-476-00	s	RES, METAL 200k 1% 1/6W
1-215-477-00	s	RES, METAL 220k 1% 1/6W
1-215-478-00	s	RES, METAL 240k 1% 1/6W
1-215-479-00	s	RES, METAL 270k 1% 1/6W
1-215-480-00	s	RES, METAL 300k 1% 1/6W
1-215-481-00	s	RES, METAL 330k 1% 1/6W
1-215-482-00	s	RES, METAL 360k 1% 1/6W
1-215-483-00	s	RES, METAL 390k 1% 1/6W
1-215-484-00	s	RES, METAL 430k 1% 1/6W
1-215-485-00	s	RES, METAL 470k 1% 1/6W
1-215-486-00	s	RES, METAL 510k 1% 1/6W
1-215-487-00	s	RES, METAL 560k 1% 1/6W
1-215-488-00	s	RES, METAL 620k 1% 1/6W
1-215-489-00	s	RES, METAL 680k 1% 1/6W
1-215-490-00	s	RES, METAL 750k 1% 1/6W
1-215-491-00	s	RES, METAL 820k 1% 1/6W
1-215-492-00	s	RES, METAL 910k 1% 1/6W
1-215-493-00	s	RES, METAL 1.0M 1% 1/6W

DAD-6 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6257-234-A	o	MOUNTED CIRCUIT BOARD, DAD-6 (FOR UC BRZ)
	A-6257-235-A	o	MOUNTED CIRCUIT BOARD, DAD-6P (FOR EK)
	A-6257-243-A	o	MOUNTED CIRCUIT BOARD, DAD-6 (FOR J)
2pcs	8-759-748-44	s	WS57C291B-45T
C3	1-124-589-11	s	ELECT 47uF 20% 16V
C4	1-124-589-11	s	ELECT 47uF 20% 16V
C12	1-107-205-00	s	MICA 13PF 5% 500V
C14	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C15	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C17	1-107-206-00	s	MICA 15PF 5% 500V
C22	1-124-234-00	s	ELECT 22uF 20% 16V
C23	1-131-353-00	s	TANTALUM 10uF 10% 35V
C24	1-131-353-00	s	TANTALUM 10uF 10% 35V
C25	1-107-202-00	s	MICA 10PF 5% 500V
C26	1-124-234-00	s	ELECT 22uF 20% 16V
C30	1-107-046-00	s	MICA 4.7PF 500V
C31	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C34	1-126-096-11	s	ELECT 10uF 20% 35V
C35	1-131-353-00	s	TANTALUM 10uF 10% 35V
C38	1-107-019-00	s	MICA 1PF 500V
C41	1-107-048-00	s	MICA 6.8PF 500V
C46	1-131-351-00	s	TANTALUM 4.7uF 10% 35V
C47	1-130-483-00	s	MYLAR 0.01uF 5% 50V
C48	1-126-096-11	s	ELECT 10uF 20% 35V
C58	1-124-234-00	s	ELECT 22uF 20% 16V
C66	1-130-479-00	s	MYLAR 0.0047uF 5% 50V
C69	1-107-157-00	s	MICA 27PF 5% 500V
C70	1-107-206-00	s	MICA 15PF 5% 500V
C72	1-124-234-00	s	ELECT 22uF 20% 16V
C74	1-107-087-00	s	MICA 120PF 5% 50V
C75	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C76	1-162-290-31	s	CERAMIC 470PF 10% 50V
C80	1-107-210-00	s	MICA 22PF 5% 500V
C81	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C82	1-161-485-00	s	CERAMIC 0.1uF 50V
C83	1-107-085-00	s	MICA 100PF 5% 50V
C84	1-107-085-00	s	MICA 100PF 5% 50V
C86	1-130-473-00	s	MYLAR 0.0015uF 5% 50V
C87	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C88	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C89	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C91	1-124-257-00	s	ELECT 2.2uF 20% 50V
C92	1-124-257-00	s	ELECT 2.2uF 20% 50V
C94	1-107-202-00	s	MICA 10PF 5% 500V
C97	1-131-353-00	s	TANTALUM 10uF 10% 35V
C101	1-126-096-11	s	ELECT 10uF 20% 35V
C103	1-124-234-00	s	ELECT 22uF 20% 16V
C104	1-124-589-11	s	ELECT 47uF 20% 16V
C105	1-126-096-11	s	ELECT 10uF 20% 35V
C109	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C110	1-107-202-00	s	MICA 10PF 5% 500V
C112	1-107-202-00	s	MICA 10PF 5% 500V
C117	1-130-479-00	s	MYLAR 0.0047uF 5% 50V
C118	1-130-479-00	s	MYLAR 0.0047uF 5% 50V

(DAD-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C120	1-107-077-00	s	MICA 47PF 5% 50V
C125	1-131-349-00	s	TANTALUM 2.2uF 10% 35V
C127	1-162-288-31	s	CERAMIC 330PF 10% 50V
C129	1-130-478-00	s	MYLAR 0.0039uF 5% 50V
C130	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C132	1-131-349-00	s	TANTALUM 2.2uF 10% 35V
C133	1-131-367-00	s	TANTALUM 22uF 10% 20V
C141	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C142	1-124-234-00	s	ELECT 22uF 20% 16V
C147	1-130-473-00	s	MYLAR 0.0015uF 5% 50V
C149	1-130-473-00	s	MYLAR 0.0015uF 5% 50V
C153	1-162-290-31	s	CERAMIC 470PF 10% 50V
C155	1-130-477-00	s	MYLAR 0.0033uF 5% 50V
C167	1-124-234-00	s	ELECT 22uF 20% 16V
C172	1-130-483-00	s	MYLAR 0.01uF 5% 50V
C173	1-131-353-00	s	TANTALUM 10uF 10% 35V
C175	1-126-096-11	s	ELECT 10uF 20% 35V
C179	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C196	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C199	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C200	1-130-473-00	s	MYLAR 0.0015uF 5% 50V
C202	1-107-210-00	s	MICA 22PF 5% 500V
C203	1-107-210-00	s	MICA 22PF 5% 500V
C217	1-107-077-00	s	MICA 47PF 5% 50V
C221	1-131-353-00	s	TANTALUM 10uF 10% 35V
C222	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C223	1-162-290-31	s	CERAMIC 470PF 10% 50V
C225	1-124-234-00	s	ELECT 22uF 20% 16V
C226	1-130-491-00	s	MYLAR 0.047uF 5% 50V
C227	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C228	1-107-085-00	s	MICA 100PF 5% 50V
C230	1-107-157-00	s	MICA 27PF 5% 500V
C231	1-107-206-00	s	MICA 15PF 5% 500V
C234	1-107-210-00	s	MICA 22PF 5% 500V
C235	1-161-485-00	s	CERAMIC 0.1uF 50V
C246	1-107-159-00	s	MICA 33PF 5% 500V
C247	1-107-159-00	s	MICA 33PF 5% 500V
C249	1-124-589-11	s	ELECT 47uF 20% 16V
C250	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C251	1-131-347-00	s	TANTALUM 1uF 10% 35V
C256	1-131-347-00	s	TANTALUM 1uF 10% 35V
C272	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C274	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C277	1-107-157-00	s	MICA 27PF 5% 500V
C278	1-107-044-00	s	MICA 3.3PF 500V
C280	1-124-589-11	s	ELECT 47uF 20% 16V
C282	1-124-589-11	s	ELECT 47uF 20% 16V
C284	1-107-044-00	s	MICA 3.3PF 500V
C287	1-124-589-11	s	ELECT 47uF 20% 16V
C288	1-124-589-11	s	ELECT 47uF 20% 16V
C291	1-161-485-00	s	CERAMIC 0.1uF 50V
C302	1-131-347-00	s	TANTALUM 1uF 10% 35V
C316	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C318	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C320	1-107-083-00	s	MICA 82PF 5% 50V
C321	1-107-046-00	s	MICA 4.7PF 500V
C325	1-124-589-11	s	ELECT 47uF 20% 16V
C326	1-124-589-11	s	ELECT 47uF 20% 16V
C329	1-161-485-00	s	CERAMIC 0.1uF 50V

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(DAD-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C334	1-124-234-00	s	ELECT 22uF 20% 16V
C338	1-124-234-00	s	ELECT 22uF 20% 16V
C344	1-161-485-00	s	CERAMIC 0.1uF 50V
C345	1-126-096-11	s	ELECT 10uF 20% 35V
C346	1-162-282-31	s	CERAMIC 100PF 10% 50V
C347	1-126-096-11	s	ELECT 10uF 20% 35V
C349	1-131-353-00	s	TANTALUM 10uF 10% 35V
C350	1-107-085-00	s	MICA 100PF 5% 50V
C353	1-126-096-11	s	ELECT 10uF 20% 35V
C357	1-126-096-11	s	ELECT 10uF 20% 35V
C360	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C362	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C364	1-107-083-00	s	MICA 82PF 5% 50V
C365	1-107-046-00	s	MICA 4.7PF 500V
C371	1-124-589-11	s	ELECT 47uF 20% 16V
C372	1-124-589-11	s	ELECT 47uF 20% 16V
C375	1-161-485-00	s	CERAMIC 0.1uF 50V
C377	1-124-589-11	s	ELECT 47uF 20% 16V
C378	1-124-589-11	s	ELECT 47uF 20% 16V
C398	1-107-049-00	s	MICA 8.2PF 500V
C399	1-107-207-00	s	MICA 16PF 5% 500V
C400	1-131-349-00	s	TANTALUM 2.2uF 10% 35V
C401	1-131-353-00	s	TANTALUM 10uF 10% 35V
C402	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C403	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C404	1-107-077-00	s	MICA 47PF 5% 50V
C405	1-131-353-00	s	TANTALUM 10uF 10% 35V
C406	1-130-479-00	s	MYLAR 0.0047uF 5% 50V
C407	1-131-353-00	s	TANTALUM 10uF 10% 35V
C408	1-130-479-00	s	MYLAR 0.0047uF 5% 50V
CN5	1-506-748-11	s	CONNECTOR, DIN 96P, MALE
CN6	1-506-746-11	s	CONNECTOR, DIN 48P, MALE
CV1	1-141-260-00	s	CAP, TRIMMER 50PF
D1	8-719-911-19	s	1SS119
D2	8-719-109-75	s	RD4.3ES-B2
D3	8-719-109-97	s	RD6.8ESB2
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
D7	8-719-911-19	s	1SS119
D8	8-719-911-19	s	1SS119
D9	8-719-911-19	s	1SS119
D10	8-719-911-19	s	1SS119
D11	8-719-911-19	s	1SS119
D12	8-719-911-19	s	1SS119
D13	8-719-911-19	s	1SS119
D14	8-719-911-19	s	1SS119
D15	8-719-911-19	s	1SS119
D16	8-719-109-60	s	RD2.7ES-B2
D18	8-719-109-85	s	RD5.1ESB2
D19	8-719-109-85	s	RD5.1ESB2
D20	8-719-109-66	s	RD3.3ES-B2
D21	8-719-911-19	s	1SS119
D22	8-719-109-85	s	RD5.1ESB2
D23	8-719-109-66	s	RD3.3ES-B2
D24	8-719-911-19	s	1SS119
D25	8-719-911-19	s	1SS119

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(DAD-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
DL1	1-415-473-11	s	DELAY LINE 140ns (FOR UC BRZ J)
DL1	1-415-444-11	s	DELAY LINE 110ns (FOR EK)
DL2	1-415-167-00	s	DELAY LINE 50ns
DL3	1-415-121-00	s	DELAY LINE 100ns
FB1	1-535-178-00	s	BEAD, FERRITE
FB2	1-535-178-00	s	BEAD, FERRITE
FB3	1-535-178-00	s	BEAD, FERRITE
FB4	1-535-178-00	s	BEAD, FERRITE
FB5	1-535-178-00	s	BEAD, FERRITE
FB6	1-535-178-00	s	BEAD, FERRITE
FB7	1-535-178-00	s	BEAD, FERRITE
FB8	1-535-178-00	s	BEAD, FERRITE
FB9	1-535-178-00	s	BEAD, FERRITE
FB11	1-535-178-00	s	BEAD, FERRITE
FB12	1-535-178-00	s	BEAD, FERRITE
FB13	1-535-178-00	s	BEAD, FERRITE
FB14	1-535-178-00	s	BEAD, FERRITE
FB15	1-535-178-00	s	BEAD, FERRITE
FB16	1-535-178-00	s	BEAD, FERRITE
FB18	1-535-178-00	s	BEAD, FERRITE
FB19	1-535-178-00	s	BEAD, FERRITE
FB20	1-535-178-00	s	BEAD, FERRITE
FB21	1-535-178-00	s	BEAD, FERRITE
FB22	1-535-178-00	s	BEAD, FERRITE
FB23	1-535-178-00	s	BEAD, FERRITE
FB24	1-535-178-00	s	BEAD, FERRITE
FB25	1-535-178-00	s	BEAD, FERRITE
FB26	1-535-178-00	s	BEAD, FERRITE
FB27	1-535-178-00	s	BEAD, FERRITE
FB28	1-535-178-00	s	BEAD, FERRITE
FB31	1-535-178-00	s	BEAD, FERRITE
FB32	1-535-178-00	s	BEAD, FERRITE
FB33	1-535-178-00	s	BEAD, FERRITE
FB34	1-535-178-00	s	BEAD, FERRITE
FB35	1-535-178-00	s	BEAD, FERRITE
FB36	1-535-178-00	s	BEAD, FERRITE
FB37	1-535-178-00	s	BEAD, FERRITE
FB38	1-535-178-00	s	BEAD, FERRITE
FL1	1-236-175-11	s	LOW PASS 6MHz
FL2	1-236-142-11	s	LOW PASS 6MHz
FL3	1-236-004-11	s	LOW PASS 2.5Hz
FL4	1-236-004-11	s	LOW PASS 2.5Hz
ICA3	8-759-015-95	s	MC1595L
ICA5	8-743-651-00	s	BX-365A
ICA7	8-759-014-96	s	MC1496P
ICA9	8-743-651-00	s	BX-365A
ICA14	8-743-651-00	s	BX-365A
ICA15	8-743-661-00	s	BX366A
ICA17	8-759-904-80	s	74F04PC
ICA18	8-759-001-90	s	MC74F74N
ICA19	8-759-001-39	s	MC74HC164N
ICA20	8-752-304-30	s	CX23043
ICA22	8-759-203-61	s	TC74HC688P
ICA23	8-759-202-82	s	TC74HC85P
ICA24	8-759-001-90	s	MC74F74N
ICA25	8-759-904-80	s	74F04PC
ICA26	8-759-202-55	s	TC74HC244P
ICA27	8-759-904-81	s	74F08PC

(DAD-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
ICB1	8-759-906-01	s	TL601CP
ICB6	8-741-124-41	s	BX1244A
ICB10	8-759-990-82	s	TL082CP
ICB11	8-759-906-01	s	TL601CP
ICB13	8-759-103-93	s	UPC393C
ICB15	8-759-918-71	s	CX23065
ICC5	8-759-202-86	s	TC74HC123P
ICC6	8-759-900-08	s	SN74LS08N
ICC7	8-749-901-22	s	BX-1463
ICC8	8-759-201-47	s	TA7357AP
ICC9	8-759-103-93	s	UPC393C
ICC10	8-759-203-08	s	TC74HC221P
ICC11	8-759-203-08	s	TC74HC221P
ICC12	8-759-203-08	s	TC74HC221P
ICC13	8-759-202-24	s	TC74HC86P
ICC15	8-759-990-82	s	TL082CP
ICC16	8-759-202-14	s	TC74HC08P
ICC18	8-759-990-82	s	TL082CP
ICC21	8-759-003-17	s	LM317T
ICC23	8-759-916-29	s	SN74HC74N
ICC24	8-759-202-14	s	TC74HC08P
ICC25	8-759-916-29	s	SN74HC74N
ICC27	8-759-203-08	s	TC74HC221P
ICD2	8-759-208-14	s	TC4066BPHB
ICD3	8-759-990-82	s	TL082CP
ICD5	8-759-203-08	s	TC74HC221P
ICD6	8-759-916-29	s	SN74HC74N
ICD8	8-759-952-07	s	SN75207BN
ICD9	8-759-202-86	s	TC74HC123P
ICD11	8-759-202-11	s	TC74HC00P
ICD12	8-759-203-08	s	TC74HC221P
ICD13	8-759-916-29	s	SN74HC74N
ICD15	8-759-924-13	s	ZN449J
ICD16	8-759-202-82	s	TC74HC85P
ICD17	8-759-947-10	s	74ACT374PC
ICD18	8-759-203-21	s	TC74HC273P
ICD19	8-759-906-76	s	74F283PC
ICD20	8-759-938-43	s	MB40578P
ICD22	8-759-947-10	s	74ACT374PC
ICD23	8-759-240-40	s	TC4040BP
ICD24	8-759-742-35	s	WS57C291-45-PC01
ICE2	8-759-208-14	s	TC4066BPHB
ICE3	8-759-990-82	s	TL082CP
ICE5	8-759-916-29	s	SN74HC74N
ICE6	8-759-202-74	s	TC74HC04P
ICE7	8-759-202-86	s	TC74HC123P
ICE8	8-759-202-32	s	TC74HC163P
ICE9	8-759-916-29	s	SN74HC74N
ICE10	8-759-202-16	s	TC74HC11P
ICE11	8-759-916-29	s	SN74HC74N
ICE12	8-759-203-08	s	TC74HC221P
ICE13	8-759-202-32	s	TC74HC163P
ICE14	8-759-202-32	s	TC74HC163P
ICE15	8-759-203-36	s	TC74HC374P
ICE16	8-759-203-36	s	TC74HC374P
ICE17	8-759-001-90	s	MC74F74N
ICE18	8-759-203-21	s	TC74HC273P

(DAD-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
ICE19	8-759-906-76	s	74F283PC
ICE20	8-759-906-76	s	74F283PC
ICE22	8-759-947-10	s	74ACT374PC
ICE24	8-759-203-36	s	TC74HC374P
ICF2	8-749-901-22	s	BX-1463
ICF6	8-759-918-71	s	CX23065
ICF9	8-759-904-80	s	74F04PC
ICF10	8-759-744-24	s	WS57C291-45-PC03
ICF11	8-759-202-14	s	TC74HC08P
ICF11	8-759-916-29	s	SN74HC74N
ICF12	8-759-202-24	s	TC74HC86P
ICF13	8-759-202-15	s	TC74HC10P
ICF14	8-759-001-39	s	MC74HC164N
ICF16	8-759-202-76	s	TC74HC30P
ICF18	8-759-906-66	s	74F86PC
ICF19	8-759-916-29	s	SN74HC74N
ICF20	8-759-202-15	s	TC74HC10P
ICF22	8-759-202-15	s	TC74HC10P
ICF23	8-759-202-15	s	TC74HC10P
ICG4	8-759-202-15	s	TC74HC10P
ICG7	8-759-202-15	s	TC74HC10P
ICG8	8-759-202-15	s	TC74HC10P
ICG9	8-759-001-90	s	MC74F74N
ICG12	8-759-203-08	s	TC74HC221P
ICG13	8-759-202-32	s	TC74HC163P
ICG14	8-759-202-32	s	TC74HC163P
ICG16	8-759-916-42	s	SN74HC133N
ICG18	8-759-202-74	s	TC74HC04P
ICG19	8-759-202-74	s	TC74HC04P
ICG20	8-759-901-23	s	SN74LS123N
ICG22	8-759-911-41	s	TL431CP
ICG23	8-759-990-82	s	TL082CP
ICH2	8-759-201-47	s	TA7357AP
ICH4	8-759-203-08	s	TC74HC221P
ICH5	8-759-203-08	s	TC74HC221P
ICH7	8-759-202-32	s	TC74HC163P
ICH8	8-759-916-29	s	SN74HC74N
ICH9	8-759-916-29	s	SN74HC74N
ICH10	8-752-304-30	s	CX23043
ICH11	8-759-202-11	s	TC74HC00P
ICH12	8-759-904-79	s	74F00PC
ICH13	8-759-001-90	s	MC74F74N
ICH14	8-759-202-93	s	TC74HC153P
ICH15	8-759-203-33	s	TC74HC367P
ICH18	8-759-916-29	s	SN74HC74N
ICH19	8-759-904-84	s	74F74PC
ICH20	8-759-904-79	s	74F00PC
ICH24	8-759-003-17	s	LM317T
ICJ2	8-759-952-07	s	SN75207BN
ICJ5	8-759-002-00	s	MC74F153N
ICJ6	8-759-900-04	s	SN74LS04N
ICJ7	8-759-952-07	s	SN75207BN
ICJ9	8-759-202-32	s	TC74HC163P
ICJ10	8-759-900-10	s	SN74LS10N
ICJ11	8-759-916-29	s	SN74HC74N
ICJ12	8-759-930-30	s	DG303ACJ
ICJ13	8-741-124-41	s	BX1244A
ICJ15	8-743-651-00	s	BX-365A

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(DAD-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
ICJ18	8-743-651-00	s	BX-365A
ICJ24	8-759-933-52	s	MB40778P
ICJ26	8-759-904-87	s	74F374PC
ICK2	8-759-990-82	s	TL082CP
ICK6	8-759-974-06	s	SN7406N
ICK7	8-759-930-30	s	DG303ACJ
ICK9	8-759-202-12	s	TC74HC02P
ICK10	8-759-918-33	s	CX20160
ICK13	8-759-202-74	s	TC74HC04P
ICK15	8-752-015-81	s	CX20158
ICK16	8-741-124-41	s	BX1244A
ICK18	8-743-651-00	s	BX-365A
ICK24	8-759-933-52	s	MB40778P
ICK27	8-759-990-82	s	TL082CP
ICL5	8-759-990-82	s	TL082CP
ICL6	8-759-911-41	s	TL431CP
ICL7	8-759-203-08	s	TC74HC221P
ICL9	8-757-903-00	s	CX7903
ICL11	8-757-732-00	s	CX773B
ICL13	8-759-202-55	s	TC74HC244P
ICL16	8-741-124-41	s	BX1244A
ICL18	8-743-651-00	s	BX-365A
ICL24	8-759-933-52	s	MB40778P
L1	1-408-423-00	s	150UH 5%
L2	1-408-417-00	s	47uH 5%
L3	1-408-417-00	s	47uH 5%
L4	1-408-409-00	s	10uH 5%
L5	1-408-409-00	s	10uH 5%
L6	1-408-409-00	s	10uH 5%
L7	1-408-409-00	s	10uH 5%
L8	1-408-425-00	s	220uH 5%
L9	1-408-398-00	s	1.2UH 5%
Q1	8-729-119-78	s	2SC2785F-F
Q2	8-729-119-76	s	2SA1175-F
Q3	8-729-119-76	s	2SA1175-F
Q4	8-729-119-78	s	2SC2785F-F
Q6	8-729-190-12	s	2SC2901
Q7	8-729-119-76	s	2SA1175-F
Q8	8-729-119-78	s	2SC2785F-F
Q9	8-729-190-12	s	2SC2901
Q10	8-729-190-12	s	2SC2901
Q11	8-729-119-78	s	2SC2785F-F
Q12	8-729-119-78	s	2SC2785F-F
Q13	8-729-190-12	s	2SC2901
Q16	8-729-800-44	s	2SK152-4
Q17	8-729-190-12	s	2SC2901
Q18	8-729-900-65	s	DTA144ES
R32	1-215-401-11	s	METAL 150 1% 1/6W
R39	1-215-401-11	s	METAL 150 1% 1/6W
R154	1-215-401-11	s	METAL 150 1% 1/6W
R237	1-215-401-11	s	METAL 150 1% 1/6W
R240	1-215-401-11	s	METAL 150 1% 1/6W
R242	1-215-401-11	s	METAL 150 1% 1/6W
R263	1-215-401-11	s	METAL 150 1% 1/6W
R270	1-215-401-11	s	METAL 150 1% 1/6W
R272	1-215-401-11	s	METAL 150 1% 1/6W
R304	1-215-863-11	s	METAL 100 5% 1W

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(DAD-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
R326	1-215-401-11	s	METAL 150 1% 1/6W
R332	1-215-401-11	s	METAL 150 1% 1/6W
R335	1-215-401-11	s	METAL 150 1% 1/6W
R339	1-215-857-11	s	METAL OXIDE 10 5% 1W F
R342	1-215-401-11	s	METAL 150 1% 1/6W
RB1	1-235-127-00	s	RESISTOR BLOCK 220x8
RB2	1-231-400-00	s	RESISTOR BLOCK 390x8
RB3	1-235-127-00	s	RESISTOR BLOCK 220x8
RB4	1-231-405-00	s	RESISTOR BLOCK 1K
RB5	1-231-405-00	s	RESISTOR BLOCK 1K
RB6	1-231-405-00	s	RESISTOR BLOCK 1K
RB7	1-235-127-00	s	RESISTOR BLOCK 220x8
RB8	1-231-400-00	s	RESISTOR BLOCK 390x8
RB9	1-235-127-00	s	RESISTOR BLOCK 220x8
RB10	1-231-400-00	s	RESISTOR BLOCK 390x8
RB11	1-235-127-00	s	RESISTOR BLOCK 220x8
RB12	1-231-400-00	s	RESISTOR BLOCK 390x8
RB13	1-231-509-00	s	RESISTOR BLOCK 1KX4
RV1	1-230-850-11	s	ADJ, METAL FILM 5M
RV2	1-237-520-21	s	ADJ, METAL 50K
RV3	1-237-517-21	s	ADJ, METAL 5K
RV4	1-237-519-21	s	ADJ, METAL 20K
RV5	1-237-517-21	s	ADJ, METAL 5K
RV6	1-237-521-21	s	ADJ, METAL 100K
RV7	1-237-516-21	s	ADJ, METAL 2K
RV8	1-237-517-21	s	ADJ, METAL 5K
RV10	1-230-838-11	s	ADJ, METAL 200
RV12	1-237-517-21	s	ADJ, METAL 5K
RV15	1-237-517-21	s	ADJ, METAL 5K
RV16	1-237-518-21	s	ADJ, METAL 10K
RV17	1-237-512-21	s	ADJ, METAL 100
RV18	1-237-518-21	s	ADJ, METAL 10K
RV19	1-237-518-21	s	ADJ, METAL 10K
RV20	1-237-515-21	s	ADJ, METAL 1K
RV21	1-237-515-21	s	ADJ, METAL 1K
RV22	1-237-514-21	s	ADJ, METAL 500
RV23	1-237-515-21	s	ADJ, METAL 1K
RV24	1-237-515-21	s	ADJ, METAL 1K
RV29	1-237-518-21	s	ADJ, METAL 10K
RV30	1-237-518-21	s	ADJ, METAL 10K
RV34	1-237-518-21	s	ADJ, METAL 10K
RV35	1-237-518-21	s	ADJ, METAL 10K
RV36	1-237-514-21	s	ADJ, METAL 500
RV38	1-237-518-21	s	ADJ, METAL 10K
RV39	1-237-518-21	s	ADJ, METAL 10K
RV40	1-237-514-21	s	ADJ, METAL 500
RV41	1-237-515-21	s	ADJ, METAL 1K
RV42	1-237-514-21	s	ADJ, METAL 500
RV45	1-237-518-21	s	ADJ, METAL 10K
RV46	1-237-514-21	s	ADJ, METAL 500
RV47	1-237-512-21	s	ADJ, METAL 100
RV48	1-230-740-21	s	VAR, CARBON 5K
RV49	1-230-740-21	s	VAR, CARBON 5K
RV50	1-230-740-21	s	VAR, CARBON 5K
RV51	1-230-740-21	s	VAR, CARBON 5K
RV52	1-237-516-21	s	ADJ, METAL 2K
RV53	1-230-838-11	s	ADJ, METAL 200
RV54	1-237-517-21	s	ADJ, METAL 5K

(DAD-6 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
RV55	1-237-517-21	s	ADJ, METAL 5K
RV56	1-237-520-21	s	ADJ, METAL 50K
RV58	1-237-517-21	s	ADJ, METAL 5K
S1	1-570-623-11	s	DIP 8-CKT
S2	1-570-623-11	s	DIP 8-CKT
S3	1-553-943-31	s	DIP
S5	1-554-010-00	s	TOGGLE
S6	1-554-010-00	s	TOGGLE
S7	1-554-010-00	s	TOGGLE
S8	1-554-010-00	s	TOGGLE
X1	1-567-979-11	s	CRYSTAL 27MHz
X2	1-567-979-11	s	CRYSTAL 27MHz
X3	1-577-088-11	s	CRYSTAL 14.3024MHz (FOR UC BRZ J)
	1-567-891-11	s	CRYSTAL 17.7MHz (FOR EK)
X4	1-567-644-11	s	CRYSTAL 14.31818MHz (FOR EK)
X5	1-567-677-11	s	CRYSTAL 14.31818MHz (FOR UC BRZ J)
	1-567-646-11	s	CRYSTAL 14.1875MHz (FOR EK)

DEC-47/P BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6257-236-A	o	MOUNTED CIRCUIT BOARD, DEC-47 (FOR UC BRZ J)
	A-6257-239-A	o	MOUNTED CIRCUIT BOARD, DEC-47P (FOR EK)
1pc	8-759-746-45	s	MB7124EZ
3pcs	8-759-746-90	s	MB7128H
1pc	8-759-747-17	s	MB7114H
1pc	8-759-747-19	s	MB7118H
1pc	8-759-747-68	s	MB7152H
7pcs	8-759-748-43	s	WS57C49B-45T
C42	1-130-495-00	s	MYLAR 0.1uF 5% 50V
C43	1-107-169-00	s	MICA 100PF 5% 500V
C51	1-131-365-00	s	TANTALUM 10uF 10% 20V
C184	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C301	1-126-096-11	s	ELECT 10uF 20% 35V
CN2	1-506-748-11	s	DIN 96P, MALE
CN3	1-506-746-11	s	DIN 48P, MALE
D1	8-719-911-19	s	1SS119
D2	8-719-911-19	s	1SS119
D3	8-719-911-19	s	1SS119
D4	8-719-911-19	s	1SS119
D5	8-719-911-19	s	1SS119
D6	8-719-911-19	s	1SS119
ICA1	8-759-970-72	s	CXK1206M
ICA3	8-759-970-72	s	CXK1206M
ICA5	8-759-970-72	s	CXK1206M
ICA7	8-759-970-72	s	CXK1206M
ICA8	8-759-947-10	s	74ACT374PC
ICA9	8-759-916-07	s	CX23038
ICA11	8-759-202-27	s	TC74HC157P
ICA12	8-752-322-72	s	CXK1202S
ICA13	8-759-947-10	s	74ACT374PC
ICA14	8-759-933-75	s	SN74S244N
ICA15	8-759-902-83	s	SN74LS283N
ICA16	8-759-203-24	s	TC74HC283P
ICA17	8-759-947-10	s	74ACT374PC
ICA18	8-759-947-10	s	74ACT374PC
ICA19	8-759-742-50	s	MB7124E-DM03
ICA20	8-759-947-10	s	74ACT374PC
ICA21	8-759-947-10	s	74ACT374PC
ICA22	8-759-742-56	s	WS57C291-45-DM09
ICA23	8-759-947-10	s	74ACT374PC
ICA24	8-759-916-07	s	CX23038
ICA26	8-759-904-87	s	74F374PC
ICA27	8-752-304-30	s	CX23043
ICB2	8-759-970-72	s	CXK1206M
ICB4	8-759-970-72	s	CXK1206M
ICB6	8-759-970-72	s	CXK1206M
ICB8	8-759-970-72	s	CXK1206M
ICB9	8-759-904-81	s	74F08PC
ICB11	8-759-947-10	s	74ACT374PC
ICB12	8-752-322-72	s	CXK1202S
ICB13	8-759-947-10	s	74ACT374PC
ICB14	8-759-933-75	s	SN74S244N
ICB15	8-752-322-72	s	CXK1202S
ICB16	8-759-947-10	s	74ACT374PC

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(DEC-47/P BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
ICB17	8-759-933-75	s	SN74S244N
ICB18	8-759-933-75	s	SN74S244N
ICB19	8-759-906-76	s	74F283PC
ICB20	8-759-906-76	s	74F283PC
ICB21	8-759-947-10	s	74ACT374PC
ICB22	8-759-916-29	s	SN74HC74N
ICB23	8-759-947-10	s	74ACT374PC
ICB24	8-759-916-29	s	SN74HC74N
ICB26	8-759-904-87	s	74F374PC
ICC2	8-759-203-24	s	TC74HC283P
ICC3	8-759-208-10	s	TC4053BPHB
ICC4	8-759-916-29	s	SN74HC74N
ICC6	8-759-916-07	s	CX23038
ICC7	8-759-202-27	s	TC74HC157P
ICC8	8-759-904-83	s	74F32PC
ICC9	8-759-202-11	s	TC74HC00P
ICC10	8-759-202-11	s	TC74HC00P
ICC11	8-759-203-08	s	TC74HC221P
ICC12	8-759-202-93	s	TC74HC153P
ICC13	8-759-203-01	s	TC74HC175P
ICC14	8-759-947-10	s	74ACT374PC
ICC15	8-752-322-72	s	CXK1202S
ICC16	8-759-947-10	s	74ACT374PC
ICC17	8-759-933-75	s	SN74S244N
ICC18	8-759-933-75	s	SN74S244N
ICC19	8-759-906-76	s	74F283PC
ICC20	8-759-906-76	s	74F283PC
ICC21	8-759-947-10	s	74ACT374PC
ICC22	8-759-742-57	s	WS57C291-45-DM10
ICC23	8-759-203-36	s	TC74HC374P
ICC24	8-759-947-10	s	74ACT374PC
ICC25	8-759-947-10	s	74ACT374PC
ICC26	8-759-904-87	s	74F374PC
ICD2	8-759-202-27	s	TC74HC157P
ICD3	8-759-904-79	s	74F00PC
ICD4	8-759-906-66	s	74F86PC
ICD7	8-759-202-11	s	TC74HC00P
ICD8	8-759-904-80	s	74F04PC
ICD9	8-759-904-81	s	74F08PC
ICD10	8-759-001-90	s	MC74F74N
ICD11	8-759-001-90	s	MC74F74N
ICD12	8-759-001-90	s	MC74F74N
ICD12	8-759-202-27	s	TC74HC157P
ICD13	8-759-001-90	s	MC74F74N
ICD14	8-759-001-90	s	MC74F74N
ICD15	8-759-202-27	s	TC74HC157P
ICD16	8-759-202-27	s	TC74HC157P
ICD18	8-759-904-80	s	74F04PC
ICD21	8-759-937-27	s	CXB1001G
ICD23	8-759-742-51	s	MB7128H-DM04
ICD24	8-759-301-24	s	HD10124
ICD25	8-759-301-24	s	HD10124
ICE2	8-759-202-14	s	TC74HC08P
ICE3	8-759-906-66	s	74F86PC
ICE4	8-759-947-10	s	74ACT374PC
ICE5	8-759-906-76	s	74F283PC
ICE6	8-759-906-66	s	74F86PC
ICE7	8-752-304-30	s	CX23043

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(DEC-47/P BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
ICE8	8-759-742-60	s	MB7152H-DM13
ICE10	8-759-001-42	s	MC74HC174N
ICE11	8-759-916-29	s	SN74HC74N
ICE12	8-759-202-27	s	TC74HC157P
ICE13	8-759-001-90	s	MC74F74N
ICE14	8-759-001-90	s	MC74F74N
ICE15	8-759-001-90	s	MC74F74N
ICE16	8-759-938-93	s	74F157APC
ICE17	8-759-904-87	s	74F374PC
ICE18	8-759-103-19	s	UPC319C
ICE23	8-759-301-24	s	HD10124
ICE24	8-759-301-24	s	HD10124
ICE25	8-759-301-24	s	HD10124
ICF2	8-759-202-14	s	TC74HC08P
ICF3	8-759-906-66	s	74F86PC
ICF5	8-759-906-76	s	74F283PC
ICF6	8-759-906-66	s	74F86PC
ICF7	8-759-904-79	s	74F00PC
ICF8	8-759-947-10	s	74ACT374PC
ICF9	8-759-742-48	s	MB7114H-DM01
ICF9	8-759-947-10	s	74ACT374PC
ICF10	8-759-202-30	s	TC74HC161P
ICF11	8-759-916-29	s	SN74HC74N
ICF11	8-759-202-30	s	TC74HC161P
ICF13	8-759-904-79	s	74F00PC
ICF14	8-759-203-21	s	TC74HC273P
ICF15	8-759-203-21	s	TC74HC273P
ICF16	8-759-001-90	s	MC74F74N
ICF17	8-759-904-87	s	74F374PC
ICF19	8-759-917-72	s	74F244PC
ICF20	8-759-904-80	s	74F04PC
ICF21	8-759-742-49	s	MB7118H-DM02
ICF22	8-759-947-10	s	74ACT374PC
ICF23	8-759-917-72	s	74F244PC
ICF24	8-759-901-44	s	74F240PC
ICF25	8-759-904-80	s	74F04PC
ICG2	8-759-947-10	s	74ACT374PC
ICG3	8-759-906-66	s	74F86PC
ICG4	8-759-947-10	s	74ACT374PC
ICG5	8-759-906-76	s	74F283PC
ICG6	8-759-906-66	s	74F86PC
ICG7	8-759-947-10	s	74ACT374PC
ICG8	8-759-742-55	s	WS57C291-45-DM08
ICG9	8-759-928-06	s	AM29821DC
ICG10	8-759-928-06	s	AM29821DC
ICG11	8-759-928-06	s	AM29821DC
ICG12	8-759-928-06	s	AM29821DC
ICG13	8-759-742-61	s	WS57C49B-45-DM14
ICG14	8-759-947-10	s	74ACT374PC
ICG15	8-759-916-07	s	CX23038
ICG17	8-759-916-07	s	CX23038
ICG18	8-759-947-10	s	74ACT374PC
ICG19	8-759-947-10	s	74ACT374PC
ICG20	8-759-742-54	s	WS57C291-45-DM07
ICG21	8-759-947-10	s	74ACT374PC
ICG23	8-759-909-36	s	CX7997
ICG25	8-759-947-10	s	74ACT374PC
ICG26	8-759-904-87	s	74F374PC

(DEC-47/P BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
ICH1	8-759-742-59	s	WS57C291-45-DM12
ICH2	8-759-742-59	s	WS57C291-45-DM12
ICH3	8-759-742-59	s	WS57C291-45-DM12
ICH4	8-759-742-59	s	WS57C291-45-DM12
ICH6	8-759-984-45	s	MB652208
ICH8	8-759-947-10	s	74ACT374PC
ICH10	8-759-909-36	s	CX7997
ICH13	8-759-909-36	s	CX7997
ICH15	8-759-947-10	s	74ACT374PC
ICH16	8-759-984-42	s	MB650203
ICH18	8-759-984-42	s	MB650203
ICH21	8-759-947-10	s	74ACT374PC
ICH23	8-759-909-36	s	CX7997
ICH25	8-759-947-10	s	74ACT374PC
ICH26	8-759-904-87	s	74F374PC
ICJ1	8-759-947-10	s	74ACT374PC
ICJ2	8-759-947-10	s	74ACT374PC
ICJ5	8-759-904-81	s	74F08PC
ICJ6	8-759-947-10	s	74ACT374PC
ICJ7	8-759-947-10	s	74ACT374PC
ICJ8	8-759-947-10	s	74ACT374PC
ICJ10	8-759-909-36	s	CX7997
ICJ13	8-759-909-36	s	CX7997
ICJ15	8-759-947-10	s	74ACT374PC
ICJ20	8-759-947-10	s	74ACT374PC
ICJ21	8-759-947-10	s	74ACT374PC
ICJ23	8-759-909-36	s	CX7997
ICJ25	8-759-947-10	s	74ACT374PC
ICJ26	8-759-904-87	s	74F374PC
L1	1-421-329-00	s	CHOKE 10uH
L2	1-421-329-00	s	CHOKE 10uH
RB3	1-231-399-00	s	RESISTOR BLOCK 330x8
RB4	1-231-399-00	s	RESISTOR BLOCK 330x8
RB5	1-235-127-00	s	RESISTOR BLOCK 220x8
RB6	1-235-127-00	s	RESISTOR BLOCK 220x8
RB7	1-231-400-00	s	RESISTOR BLOCK 390x8
RB8	1-231-400-00	s	RESISTOR BLOCK 390x8
RB9	1-235-127-00	s	RESISTOR BLOCK 220x8
RB10	1-235-127-00	s	RESISTOR BLOCK 220x8
RB11	1-231-399-00	s	RESISTOR BLOCK 330x8
RB12	1-231-399-00	s	RESISTOR BLOCK 330x8
RB13	1-231-493-00	s	RESISTOR BLOCK, 220X4
RB14	1-231-400-00	s	RESISTOR BLOCK 390x8
RB15	1-231-400-00	s	RESISTOR BLOCK 390x8
RB16	1-235-452-11	s	RESISTOR BLOCK 330x4
RB17	1-235-452-11	s	RESISTOR BLOCK 330x4
RB20	1-231-493-00	s	RESISTOR BLOCK, 220X4
RB21	1-231-533-00	s	RESISTOR BLOCK 10Kx4
RB22	1-231-533-00	s	RESISTOR BLOCK 10Kx4
RB23	1-231-533-00	s	RESISTOR BLOCK 10Kx4
RB24	1-231-410-00	s	RESISTOR BLOCK 10Kx8
RB25	1-231-533-00	s	RESISTOR BLOCK 10Kx4
RB26	1-231-410-00	s	RESISTOR BLOCK 10Kx8
RV1	1-230-740-11	s	VAR, CARBON 5K
S1	1-554-080-00	s	DIGITAL
S2	1-554-080-00	s	DIGITAL

(DEC-47/P BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
S3	1-552-509-00	s	DIP 1-CKT
S4	1-554-080-00	s	DIGITAL
S5	1-552-509-00	s	DIP 1-CKT
S6	1-570-848-11	s	SLIDE
S7	1-516-923-21	s	DIP
S8	1-516-925-21	s	DIP 8-CKT
S14	1-554-027-00	s	DIGITAL
S15	1-554-010-00	s	TOGGLE
S16	1-554-027-00	s	DIGITAL
S17	1-554-010-00	s	TOGGLE
S18	1-554-010-00	s	TOGGLE
S19	1-554-010-00	s	TOGGLE

DSP-25 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-630-360-11	o	PRINTED CIRCUIT BOARD, DSP-25
CN16	1-506-489-11	o	10P, MALE
D1	8-719-901-48	s	LED LT-9010N2
D2	8-719-901-48	s	LED LT-9010N2
D3	8-719-901-49	s	LT-9010H
D4	8-719-901-49	s	LT-9010H
D5	8-719-911-19	s	1SS119
IC1	8-759-202-11	s	TC74HC00P
IC2	8-759-974-17	s	SN7417N

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

EX-205 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6279-514-A	s	EX-205 ASSY
CN1	1-506-748-11	s	DIN 96P, MALE
CN2	1-506-746-11	s	DIN 48P, MALE
CN4	1-563-341-11	s	DIN 96P, FEMALE
CN5	1-563-339-11	o	DIN 48P, FEMALE
D1	8-719-812-41	s	TLR124
D2	8-719-812-41	s	TLR124
D3	8-719-812-41	s	TLR124
D4	8-719-812-41	s	TLR124
R1	1-249-418-11	s	CARBON 1.2K 5% 1/4W
R2	1-249-418-11	s	CARBON 1.2K 5% 1/4W
R3	1-249-411-11	s	CARBON 330 5% 1/4W
R4	1-249-411-11	s	CARBON 330 5% 1/4W

MB-236 BOARDD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6264-114-A	o	MOUNTED CIRCUIT BOARD, MB-236
CN1	1-563-337-11	s	DIN 96P, FEMALE
CN2	1-563-337-11	s	DIN 96P, FEMALE
CN3	1-563-335-11	s	DIN 48P, FEMALE
CN5	1-563-337-11	s	DIN 96P, FEMALE
CN6	1-563-335-11	s	DIN 48P, FEMALE
CN7	1-564-243-00	o	PIN, 6P
CN8	1-564-243-00	o	PIN, 6P
CN9	1-506-699-11	o	HEADER 26P
CN10	1-506-471-11	s	6P, MALE
CN11	1-506-683-11	o	16P
CN12	1-506-473-11	s	8P, MALE
CN13	1-506-467-11	s	2P, MALE
CN14	1-506-469-11	s	4P, MALE
CN15	1-506-471-11	s	6P, MALE
CN39	1-506-468-11	s	3P, MALE
CN40	1-506-468-11	s	3P, MALE
R1	1-207-931-00	s	WIREWOUND 12 10% 5W F
R2	1-207-931-00	s	WIREWOUND 12 10% 5W F
R3	1-249-405-11	s	CARBON 100 5% 1/4W
R4	1-249-405-11	s	CARBON 100 5% 1/4W

SEP-3/P BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6257-237-A	o	MOUNTED CIRCUIT BOARD, SEP-3 (FOR UC BRZ J)
	A-6257-238-A	o	MONUTED CIRCUIT BOARD, SEP-3P (FOR EK)
1pc	1-631-442-11	o	PRINTED CIRCUIT BOARD, DUS-303 (FOR UC BRZ: S/N10001 THRU. 10020) (FOR J: S/N10001 THRU. 10010) (FOR EK: S/N10001 THRU. 10030)
1pc	8-759-746-90	s	MB7128H
3pcs	8-759-747-19	s	MB7118H
2pcs	8-759-747-68	s	MB7152H
5pcs	8-759-748-43	s	WS57C49B-45T
CN1	1-506-748-11	s	DIN 96P, MALE
IC1	8-759-928-06	s	AM29821DC
IC2	8-759-928-06	s	AM29821DC
IC3	8-759-928-06	s	AM29821DC
IC4	8-759-904-79	s	74F00PC
IC5	8-759-904-80	s	74F04PC
IC6	8-759-904-87	s	74F374PC
IC7	8-752-322-72	s	CXK1202S
IC8	8-759-947-10	s	74ACT374PC
IC9	8-759-906-76	s	74F283PC
IC10	8-759-906-76	s	74F283PC
IC11	8-759-906-76	s	74F283PC
IC12	8-759-928-06	s	AM29821DC
IC13	8-759-984-44	s	MB650207
IC14	8-759-933-75	s	SN74S244N
IC15	8-759-947-10	s	74ACT374PC
IC16	8-752-322-72	s	CXK1202S
IC17	8-759-947-10	s	74ACT374PC
IC18	8-759-947-10	s	74ACT374PC
IC19	8-759-906-76	s	74F283PC
IC20	8-759-906-76	s	74F283PC
IC21	8-759-906-76	s	74F283PC
IC22	8-759-906-76	s	74F283PC
IC23	8-759-904-81	s	74F08PC
IC24	8-759-947-10	s	74ACT374PC
IC25	8-759-947-10	s	74ACT374PC
IC26	8-759-947-10	s	74ACT374PC
IC27	8-759-904-88	s	74F534PC
IC28	8-759-906-66	s	74F86PC
IC29	8-759-904-88	s	74F534PC
IC30	8-759-904-88	s	74F534PC
IC31	8-759-001-90	s	MC74F74N
IC32	8-759-947-10	s	74ACT374PC
IC33	8-759-947-10	s	74ACT374PC
IC34	8-759-906-76	s	74F283PC
IC35	8-759-906-76	s	74F283PC
IC36	8-759-906-76	s	74F283PC
IC37	8-759-906-76	s	74F283PC
IC38	8-752-304-30	s	CX23043
IC39	8-752-322-72	s	CXK1202S
IC40	8-752-322-72	s	CXK1202S
IC41	8-759-970-72	s	CXK1206M
IC42	8-759-906-76	s	74F283PC
IC43	8-759-947-10	s	74ACT374PC
IC44	8-759-906-76	s	74F283PC
IC45	8-759-947-10	s	74ACT374PC

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(SEP-3/P BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC46	8-759-947-10	s	74ACT374PC
IC47	8-759-947-10	s	74ACT374PC
IC48	8-759-947-10	s	74ACT374PC
IC49	8-759-916-07	s	CX23038
IC50	8-759-916-07	s	CX23038
IC51	8-759-947-10	s	74ACT374PC
IC52	8-759-970-72	s	CXK1206M
IC53	8-759-947-10	s	74ACT374PC
IC54	8-752-322-72	s	CXK1202S
IC55	8-759-947-10	s	74ACT374PC
IC56	8-759-916-07	s	CX23038
IC57	8-759-916-07	s	CX23038
IC58	8-759-947-10	s	74ACT374PC
IC59	8-759-904-83	s	74F32PC
IC60	8-759-947-10	s	74ACT374PC
IC61	8-752-322-72	s	CXK1202S
IC62	8-759-970-72	s	CXK1206M
IC63	8-759-928-06	s	AM29821DC
IC64	8-759-928-06	s	AM29821DC
IC65	8-759-947-10	s	74ACT374PC
IC66	8-759-947-10	s	74ACT374PC
IC67	8-759-904-88	s	74F534PC
IC68	8-752-304-30	s	CX23043
IC69	8-759-001-90	s	MC74F74N
IC70	8-759-947-10	s	74ACT374PC
IC71	8-759-001-90	s	MC74F74N
IC72	8-759-970-72	s	CXK1206M
IC73	8-759-909-36	s	CX7997
IC74	8-759-909-36	s	CX7997
IC75	8-759-909-36	s	CX7997
IC76	8-759-912-40	s	SN74S240N
IC77	8-759-904-88	s	74F534PC
IC78	8-752-304-30	s	CX23043
IC79	8-759-904-80	s	74F04PC
IC80	8-759-915-41	s	74F02PC
IC81	8-759-904-80	s	74F04PC
IC82	8-759-947-10	s	74ACT374PC
IC83	8-759-947-10	s	74ACT374PC
IC84	8-759-947-10	s	74ACT374PC
IC85	8-759-742-45	s	WS57C49B-45-YC09
IC86	8-759-742-45	s	WS57C49B-45-YC09
IC87	8-759-742-45	s	WS57C49B-45-YC09
IC88	8-759-001-90	s	MC74F74N
IC89	8-759-933-75	s	SN74S244N
IC90	8-759-947-10	s	74ACT374PC
IC91	8-759-928-06	s	AM29821DC
IC92	8-759-928-06	s	AM29821DC
IC93	8-759-928-06	s	AM29821DC
IC94	8-759-001-90	s	MC74F74N
IC95	8-759-947-10	s	74ACT374PC
IC96	8-759-947-10	s	74ACT374PC
IC97	8-759-742-40	s	MB7118H-YC04
IC98	8-759-947-10	s	74ACT374PC
IC99	8-759-742-39	s	MB7118H-YC03
IC100	8-759-947-10	s	74ACT374PC
IC101	8-759-744-25	s	MB7152H-YC05
IC102	8-759-916-07	s	CX23038
IC103	8-759-916-07	s	CX23038
IC104	8-759-947-10	s	74ACT374PC

(SEP-3/P BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC105	8-759-906-76	s	74F283PC
IC106	8-759-947-10	s	74ACT374PC
IC107	8-759-906-76	s	74F283PC
IC108	8-759-906-66	s	74F86PC
IC109	8-759-915-41	s	74F02PC
IC110	8-759-916-07	s	CX23038
IC111	8-759-916-07	s	CX23038
IC112	8-759-984-42	s	MB650203
IC113	8-759-984-42	s	MB650203
IC114	8-759-906-69	s	SN74LS669N
IC115	8-759-947-10	s	74ACT374PC
IC116	8-759-933-75	s	SN74S244N
IC117	8-759-742-44	s	MB7152H-YC08
IC118	8-759-947-10	s	74ACT374PC
IC119	8-759-906-76	s	74F283PC
IC120	8-759-947-10	s	74ACT374PC
IC121	8-759-906-76	s	74F283PC
IC122	8-759-742-38	s	MB7118H-YC02
IC123	8-759-947-10	s	74ACT374PC
IC124	8-759-742-37	s	MB7118H-YC01
IC125	8-759-947-10	s	74ACT374PC
IC126	8-759-904-81	s	74F08PC
IC127	8-759-904-88	s	74F534PC
IC128	8-759-928-06	s	AM29821DC
IC129	8-759-928-06	s	AM29821DC
IC130	8-759-906-76	s	74F283PC
IC131	8-759-906-76	s	74F283PC
IC132	8-759-984-43	s	MB650205
IC133	8-759-984-43	s	MB650205
IC134	8-759-928-06	s	AM29821DC
IC135	8-759-742-42	s	MB7128H-YC06
IC136	8-759-906-76	s	74F283PC
IC137	8-759-906-76	s	74F283PC
IC138	8-759-947-10	s	74ACT374PC
IC139	8-759-906-66	s	74F86PC
IC140	8-759-947-10	s	74ACT374PC
IC141	8-759-947-10	s	74ACT374PC
IC142	8-759-928-06	s	AM29821DC
IC143	8-759-906-76	s	74F283PC
IC144	8-759-904-87	s	74F374PC
IC145	8-759-906-76	s	74F283PC
IC146	8-759-906-76	s	74F283PC
IC147	8-759-906-76	s	74F283PC
IC148	8-759-906-76	s	74F283PC
IC149	8-759-928-06	s	AM29821DC
IC150	8-759-742-43	s	WS57C291-45-YC07
IC151	8-759-906-76	s	74F283PC
IC152	8-759-928-06	s	AM29821DC
L1	1-421-329-00	s	CHOKE 10uH
RB1	1-231-399-00	s	RESISTOR BLOCK 330x8
RB2	1-235-127-00	s	RESISTOR BLOCK 220x8
RB4	1-231-405-00	s	RESISTOR BLOCK 1K
RB4	1-231-509-00	s	RESISTOR BLOCK 1KX4
RB5	1-231-405-00	s	RESISTOR BLOCK 1K
RB6	1-231-405-00	s	RESISTOR BLOCK 1K
RB7	1-231-509-00	s	RESISTOR BLOCK 1KX4
RB8	1-231-509-00	s	RESISTOR BLOCK 1KX4

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(SEP-3/P BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
S1	1-552-509-00	s	DIP 1-CKT
S1	1-570-848-11	s	SLIDE
S2	1-554-080-00	s	DIGITAL
S2	1-570-623-11	s	DIP 8-CKT
S3	1-570-848-11	s	SLIDE
S4	1-570-848-11	s	SLIDE
S7	1-554-080-00	s	DIGITAL
S8	1-554-080-00	s	DIGITAL

SW-283 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-625-233-11	o	PRINTED CIRCUIT BOARD, SW-283
C1	1-124-257-00	s	ELECT 2.2uF 20% 50V
C2	1-124-257-00	s	ELECT 2.2uF 20% 50V
CN1001	1-506-467-11	o	2P, MALE
CN1003	1-506-469-11	s	4P, MALE
Q1	8-729-800-43	s	2SK152-3
R2	1-249-401-11	s	CARBON 47 5% 1/4W
R3	1-247-895-00	s	CARBON 470K 5% 1/4W
R4	1-249-423-11	s	CARBON 3.3K 5% 1/4W
S1	1-554-481-00	s	SLIDE

VIO-14/P BOARD

Ref. No. or Q'ty	Part No.	SP	Description
	This board includes the VA-84 board.		
1pc	A-6257-232-A	o	MOUNTED CIRCUIT BOARD, VIO-14 (FOR UC BRZ J)
	A-6257-238-A	o	MOUNTED CIRCUIT BOARD, VIO-14P (FOR EK)
C1	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C2	1-124-589-11	s	ELECT 47uF 20% 16V
C2	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C3	1-124-589-11	s	ELECT 47uF 20% 16V
C3	1-163-037-11	s	CERAMIC, CHIP 0.022uF 10% 25V
C4	1-161-485-00	s	CERAMIC 0.1uF 50V
C5	1-124-589-11	s	ELECT 47uF 20% 16V
C7	1-161-485-00	s	CERAMIC 0.1uF 50V
C8	1-124-589-11	s	ELECT 47uF 20% 16V
C18	1-126-157-11	s	ELECT 10uF 20% 16V
C19	1-130-483-00	s	MYLAR 0.01uF 5% 50V
C20	1-107-167-00	s	MICA 75PF 5% 50V
C23	1-126-157-11	s	ELECT 10uF 20% 16V
C24	1-124-598-11	s	ELECT 22uF 20% 25V
C26	1-124-598-11	s	ELECT 22uF 20% 25V
C27	1-130-471-00	s	MYLAR 0.001uF 5% 50V
C31	1-107-044-00	s	MICA 3.3PF 500V
C35	1-107-044-00	s	MICA 3.3PF 500V
C37	1-107-044-00	s	MICA 3.3PF 500V
C40	1-107-044-00	s	MICA 3.3PF 500V
C65	1-124-009-11	s	ELECT 47MF 20% 25V
C66	1-124-009-11	s	ELECT 47MF 20% 25V
CN1	1-566-095-11	o	PIN, BOARD TO BOARD 11P
CN17	1-506-471-11	s	6P, MALE
CN18	1-506-473-11	s	8P, MALE
CN19	1-506-471-11	s	6P, MALE
CN20	1-506-469-11	s	4P, MALE
CN21	1-506-473-11	s	8P, MALE
CN22	1-506-473-11	s	8P, MALE
CN23	1-506-473-11	s	8P, MALE
D1	8-719-911-19	s	1SS119
D2	8-719-101-97	s	1SS97-1
D3	8-719-911-19	s	1SS119
FB1	1-535-178-00	s	BEAD, FERRITE
FB2	1-535-178-00	s	BEAD, FERRITE
IC1	8-743-651-00	s	BX-365A
IC1	8-752-015-81	s	CX20158
IC2	8-743-651-00	s	BX-365A
IC3	8-743-651-00	s	BX-365A
IC4	8-749-900-77	s	BX-1333L
IC5	8-759-202-11	s	TC74HC00P
IC6	8-743-651-00	s	BX-365A
IC7	8-743-651-00	s	BX-365A
IC8	8-743-651-00	s	BX-365A
IC9	8-743-651-00	s	BX-365A
IC10	8-759-906-01	s	TL601CP
IC11	8-759-990-82	s	TL082CP
IC12	8-759-604-29	s	M5F7805
IC13	8-759-604-29	s	M5F7805
IC14	8-759-604-29	s	M5F7805

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(VIO-14/P BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
IC15	8-759-604-29	s	M5F7805
IC16	8-743-651-00	s	BX-365A
IC17	8-743-651-00	s	BX-365A
Q1	8-729-190-12	s	2SC2901
R1	1-216-669-11	s	METAL, CHIP 5.6K 0.5% 1/10W
R2	1-216-659-11	s	METAL, CHIP 2.2K 0.5% 1/10W
R13	1-216-763-11	s	METAL FOIL 713.4
R14	1-215-957-11	s	METAL FOIL 1.000K
R17	1-216-764-11	s	METAL FOIL 1400
R18	1-216-766-11	s	METAL FOIL 2910
R19	1-216-762-11	s	METAL FOIL 564.3
R20	1-215-957-11	s	METAL FOIL 1.000K
R62	1-215-401-11	s	METAL 150 1% 1/6W
R64	1-215-401-11	s	METAL 150 1% 1/6W
R70	1-215-401-11	s	METAL 150 1% 1/6W
R72	1-215-401-11	s	METAL 150 1% 1/6W
R73	1-215-401-11	s	METAL 150 1% 1/6W
R86	1-215-401-11	s	METAL 150 1% 1/6W
RV1	1-230-836-11	s	ADJ, METAL 50
RV2	1-230-836-11	s	ADJ, METAL 50
RV3	1-230-836-11	s	ADJ, METAL 50
RV4	1-230-838-11	s	ADJ, METAL 200
RV5	1-237-514-21	s	ADJ, METAL 500
RV6	1-237-514-21	s	ADJ, METAL 500
RV7	1-237-517-21	s	ADJ, METAL 5K
RV8	1-230-838-11	s	ADJ, METAL 200
RV9	1-230-836-11	s	ADJ, METAL 50
RV10	1-230-836-11	s	ADJ, METAL 50
RV12	1-230-836-11	s	ADJ, METAL 50
RV13	1-230-836-11	s	ADJ, METAL 50
RV14	1-237-512-21	s	ADJ, METAL 100
RV15	1-237-512-21	s	ADJ, METAL 100
RV16	1-230-836-11	s	ADJ, METAL 50
RV17	1-237-512-21	s	ADJ, METAL 100
RV18	1-237-512-21	s	ADJ, METAL 100
RV801	1-237-518-21	s	ADJ, METAL 10K

VA-84 BOARD

All of the component parts on the VA-84 board are supplied together when you order VIO-14 or VIO-14P board.

Ref. No. or Q'ty	Part No.	SP	Description
10pcs	A-6268-345-A	o	MOUNTED CIRCUIT BOARD, VA-84
C1	1-163-037-11	s	CHIP CERAMIC 0.022MF
C2	1-163-037-11	s	CHIP CERAMIC 0.022MF
C3	1-163-037-11	s	CHIP CERAMIC 0.022MF
CN1	1-566-095-11	s	CHIP CERAMIC 0.022MF
IC1	8-752-015-81	s	CX20158

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

FRAME

Ref. No. or Q'ty	Part No.	SP	Description
CN10	1-562-151-11	o	HOUSING, 6P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN11	1-561-383-11	o	RECEPTACLE, 16P
CN12	1-562-153-11	o	HOUSING, 8P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN13	1-562-147-11	o	HOUSING, 2P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN14	1-562-149-11	o	HOUSING, 4P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN15	1-562-151-11	o	HOUSING, 6P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN16	1-562-151-11	o	HOUSING, 6P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN17	1-562-151-11	o	HOUSING, 6P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN18	1-562-153-11	o	HOUSING, 8P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN19	1-562-151-11	o	HOUSING, 6P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN20	1-562-149-11	o	HOUSING, 4P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN22	1-562-153-11	o	HOUSING, 8P
	1-563-088-11	o	TERMINAL SOLDERLESS
CN23	1-562-153-11	o	HOUSING, 8P
	1-563-088-11	o	TERMINAL SOLDERLESS
CN34	1-562-160-11	o	R-F 12P (DUB)
CN35	1-563-848-11	s	SOCKET, D-SUB, 25P (CCIR)
CN36	1-566-376-11	s	PIN, D-SUB, 15P (REMOTE)
CN39	1-562-148-11	o	HOUSING, 3P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN40	1-562-148-11	o	HOUSING, 3P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN1001	1-562-147-11	o	HOUSING, 2P
	1-563-088-11	o	TERMINAL SOLDERLESS
CN1003	1-562-149-11	o	HOUSING, 4P
	1-563-008-11	o	TERMINAL SOLDERLESS
CN2001	1-561-781-21	s	BNC, FEMALE (R/R-Y)
CN2002	1-561-781-21	s	BNC, FEMALE (G/Y)
CN2003	1-561-781-21	s	BNC, FEMALE (B/B-Y)
CN2004	1-561-781-21	s	BNC, FEMALE (MIXED SYNC)
CN2005	1-561-781-21	s	BNC, FEMALE (VIDEO IN)
CN2006	1-561-781-21	s	BNC, FEMALE (VIDEO IN)
CN2007	1-561-781-21	s	BNC, FEMALE (REF VIDEO IN)
CN2008	1-561-781-21	s	BNC, FEMALE (REF VIDEO IN)
CN2009	1-561-781-21	s	BNC, FEMALE (MONITOR OUT)

PS-195 BOARD

This board includes the HIC-1.

Ref. No. or Q'ty	Part No.	SP	Description
1pc	9-955-563-01	o	MOUNTED CIRCUIT BOARD, PS-195
C1	⚠1-136-527-11	s	METAL FILM 0.47uF
C2	⚠1-161-742-00	s	CERAMIC 0.0022uF 20%
C3	⚠1-161-742-00	s	CERAMIC 0.0022uF 20%
C4a	9-955-574-01	s	ELECT 250V 330uF
C4b	9-955-574-01	s	ELECT 250V 330uF
C5a	9-955-574-01	s	ELECT 250V 330uF
C5b	9-955-574-01	s	ELECT 250V 330uF
C6	9-955-577-01	s	FILM 440V 1uF
C7	1-102-030-00	s	CERAMIC 500V 330pF 10%
C8	⚠1-161-742-00	s	CERAMIC 0.0022uF 20%
C9a	9-955-575-01	s	ELECT 50V 47uF
C9b	9-955-575-01	s	ELECT 50V 47uF
C10	9-955-576-01	s	ELECT 25V 100uF
C12	1-102-030-00	s	CERAMIC 500V 330pF 10%
C13	1-102-030-00	s	CERAMIC 500V 330pF 10%
C14	1-102-030-00	s	CERAMIC 500V 330pF 10%
C15	1-102-030-00	s	CERAMIC 500V 330pF 10%
C16	1-102-030-00	s	CERAMIC 500V 330pF 10%
C17	1-102-030-00	s	CERAMIC 500V 330pF 10%
C18	1-102-030-00	s	CERAMIC 500V 330pF 10%
C19	1-102-030-00	s	CERAMIC 500V 330pF 10%
C20	1-102-030-00	s	CERAMIC 500V 330pF 10%
C21	1-102-030-00	s	CERAMIC 500V 330pF 10%
C22	1-136-203-11	s	FILM 630V 0.01uF 10%
C23	1-136-203-11	s	FILM 630V 0.01uF 10%
C24	1-136-203-11	s	FILM 630V 0.01uF 10%
C25	1-136-203-11	s	FILM 630V 0.01uF 10%
C26	1-136-203-11	s	FILM 630V 0.01uF 10%
C27	9-955-578-01	s	ELECT 35V 470uF
C28	9-955-578-01	s	ELECT 35V 470uF
C29	9-955-578-01	s	ELECT 35V 470uF
C30a	9-955-579-01	s	ELECT 10V 1500uF
C30b	9-955-579-01	s	ELECT 10V 1500uF
C30c	9-955-579-01	s	ELECT 10V 1500uF
C30d	9-955-579-01	s	ELECT 10V 1500uF
C31d	9-955-578-01	s	ELECT 35V 470uF
C32	9-955-578-01	s	ELECT 35V 470uF
C33	9-955-578-01	s	ELECT 35V 470uF
C34	9-955-578-01	s	ELECT 35V 470uF
C35	9-955-578-01	s	ELECT 35V 470uF
C36	1-130-471-00	s	PE TEREPHTHALATE 50V 0.001uF
C37	9-955-580-01	s	ELECT 25V 470uF
C38	9-955-580-01	s	ELECT 25V 470uF
C39	9-955-580-01	s	ELECT 25V 470uF
C40a	9-955-579-01	s	ELECT 10V 1500uF
C40b	9-955-579-01	s	ELECT 10V 1500uF
C40c	9-955-579-01	s	ELECT 10V 1500uF
C40d	9-955-579-01	s	ELECT 10V 1500uF
C41	9-955-580-01	s	ELECT 25V 470uF
C42	9-955-581-01	s	CERAMIC 50V 0.1uF
C43	9-955-581-01	s	CERAMIC 50V 0.1uF
C44	9-955-581-01	s	CERAMIC 50V 0.1uF
C45	9-955-581-01	s	CERAMIC 50V 0.1uF
C46	9-955-581-01	s	CERAMIC 50V 0.1uF
C47	9-955-581-01	s	CERAMIC 50V 0.1uF

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(PS-195 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
C48	9-955-581-01	s	CERAMIC 50V 0.1uF
C49	9-955-581-01	s	CERAMIC 50V 0.1uF
C51	9-955-581-01	s	CERAMIC 50V 0.1uF
C52	9-955-576-01	s	ELECT 25V 100uF
CN1	1-560-177-11	o	4P
CN2	1-508-901-00	o	3P
CN4	9-955-592-01	o	PM-1 12P
D1	9-955-567-01	s	AC16FGM
D2	8-719-916-03	s	RGP10G
D3	9-955-568-01	s	4J4B41
D4	8-719-100-74	s	RD16EB-2
D5	8-719-100-38	s	RD6.2EB-2
D6	8-719-108-13	s	1S955
D7a	8-719-108-13	s	1S955
D7b	8-719-108-13	s	1S955
D7c	8-719-108-13	s	1S955
D7d	8-719-108-13	s	1S955
D9	8-719-301-09	s	CTL-12S
D10	8-719-301-09	s	CTL-12S
D13	8-719-301-09	s	CTL-12S
D15	8-719-301-05	s	CTB-34M
D17	8-719-301-09	s	CTL-12S
D19	8-719-100-68	s	RD13EB-2
D20	8-719-100-68	s	RD13EB-2
S21	8-719-100-68	s	RD13EB-2
D22	8-719-100-35	s	RD5.6EB-2
D23	8-719-100-35	s	RD5.6EB-2
D24	8-719-108-13	s	1S955
D25	8-719-108-13	s	1S955
D26	8-719-108-13	s	1S955
D27	8-719-108-13	s	1S955
D28a	8-719-108-13	s	1S955
D28b	8-719-108-13	s	1S955
D28c	8-719-108-13	s	1S955
D28d	8-719-108-13	s	1S955
D29	9-955-569-01	s	11DQ04
D30	9-955-569-01	s	11DQ04
D31	9-955-569-01	s	11DQ04
D32	9-955-569-01	s	11DQ04
D33	8-719-916-03	s	RGP10G
D34	8-719-961-03	s	RGP10G
D40a	8-719-123-88	s	RD82E-B
D40b	8-719-123-88	s	RD82E-B
F1	⚠1-532-603-21	s	TEMPERATURE 250V
L1	⚠9-955-582-01	s	CHOKE SN-12-500
L2	⚠9-955-582-01	s	CHOKE SN-12-500
L3	⚠9-955-583-01	s	CMF-2100
L4	9-955-584-01	s	CHOKE MY-2-300
L5	9-955-584-01	s	CHOKE MY-2-300
L6	9-955-585-01	s	CHOKE MY-1-500
L7	9-955-586-01	s	CHOKE MY-16-60
L8	9-955-585-01	s	CHOKE MY-1-500
L9	9-955-587-01	s	CHOKE SN-10-500
L10	9-955-587-01	s	CHOKE SN-10-500
L11	9-955-587-01	s	CHOKE SN-10-500
L12	9-955-588-01	s	CHOKE SKP-3-520

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

(PS-195 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
L14	9-955-587-01	s	CHOKE SN-10-500
Q1	9-955-564-01	s	2SK386
Q2	9-955-564-01	s	2SK386
Q3	9-955-564-01	s	2SK386
Q4	9-955-565-01	s	2SA984
R1	9-955-570-01	s	10 10W
R2	1-247-713-11	s	CARBON 1K 1/4W 5%
R3	1-247-696-11	s	CARBON 47 1/4W 5%
R4	9-955-571-01	s	CARBON 330 1/4W
R6	1-247-696-11	s	CARBON 47 1/4W 5%
R7	9-955-571-01	s	CARBON 330K 1/4W
R8	9-955-571-01	s	CARBON 330K 1/4W
R9	1-215-886-11	s	METAL OXIDE FILM 100 2W 5%
R10	1-215-886-11	s	METAL OXIDE FILM 100 2W 5%
R13	1-215-889-00	s	METAL OXIDE FILM 330 2W 5%
R14	9-955-572-01	s	CARBON 3K 1/4W
R16	1-247-700-11	s	CARBON 100 1/4W 5%
R25	1-247-700-11	s	CARBON 100 1/4W 5%
R26	1-247-758-11	s	CARBON 3.3K 1/4W 5%
R27	1-247-758-11	s	CARBON 3.3K 1/4W 5%
R28	1-247-758-11	s	CARBON 3.3K 1/4W 5%
R29	1-215-884-11	s	METAL OXIDE FILM 47 2W 5%
R30	1-247-710-11	s	CARBON 560 1/4W 5%
R31	1-247-700-11	s	CARBON 100 1/4W 5%
R32	1-247-700-11	s	CARBON 100 1/4W 5%
R33	1-247-700-11	s	CARBON 100 1/4W 5%
R34	1-247-696-11	s	CARBON 47 1/4W 5%
R35	1-247-713-11	s	CARBON 1K 1/4W 5%
R36	1-247-696-11	s	CARBON 47 1/4W 5%
R37	1-247-722-11	s	CARBON 5.6K 1/4W 5%
R38	1-247-710-11	s	CARBON 560 1/4W 5%
R39	9-955-573-01	s	CARBON 240 1/4W
R40	1-215-860-11	s	METAL OXIDE FILM 33 1W 5%
R42	9-955-571-01	s	CARBON 330 1/4W
R43	1-247-713-11	s	CARBON 1K 1/4W 5%
R44	1-247-752-11	s	CARBON 1K 1/2W 5%
R45	1-247-752-11	s	CARBON 1K 1/2W 5%
R46	1-247-700-11	s	CARBON 100 1/4W 5%
R47	1-247-700-11	s	CARBON 100 1/4W 5%
R48	1-247-713-11	s	CARBON 1K 1/4W 5%
R50	1-247-743-11	s	CARBON 220 1/2W 5%
R51	1-247-721-11	s	CARBON 4.7K 1/4W 5%
R52	1-247-710-11	s	CARBON 560 1/4W 5%
R53	1-247-717-11	s	CARBON 2.2K 1/4W 5%
SW1	1-570-258-11	s	THERMAL REED
T1	⚠9-955-589-01	s	S308-01
T4	⚠9-955-590-01	s	S301-03
U1	8-759-280-12	s	TA78012AP
U2	⚠9-955-566-01	s	PS2501-1-LA
U3	⚠9-955-566-01	s	PS2501-1-LA
U4	8-749-931-22	s	SI-3122V
U5	8-749-931-22	s	SI-3122V
U6	8-749-931-22	s	SI-3122V
U7	8-749-930-52	s	SI-3052V
U8	8-719-945-60	s	PC-827
U9	8-719-945-60	s	PC-827

(PS-195 BOARD)

Ref. No. or Q'ty	Part No.	SP	Description
VR1	1-237-514-21	s	ADJ, CEMENT 500
VR2	1-237-518-21	s	ADJ, CEMENT 500

HIC-1

Ref. No. or Q'ty	Part No.	SP	Description
	All of the component parts on the HIC-1 are supplied together when you order PS-195 board.		
1pc	9-955-593-01	s	HIC-1
C1	1-161-898-11	s	CERAMIC 0.47uF
C2	9-955-598-01	s	CERAMIC 3.3uF
C3	9-955-599-01	s	ELECT 50V 10uF
C4a	9-955-600-01	s	ELECT 25V 100uF
C4b	9-955-600-01	s	ELECT 25V 100uF
C4c	9-955-600-01	s	ELECT 25V 100uF
C5	1-130-471-00	s	PE TEREPHTHALATE 0.001uF 50V
C6	9-955-599-01	s	ELECT 50V 10uF
C7	9-955-599-01	s	ELECT 50V 10uF
C8	1-136-165-00	s	PE TEREPHTHALATE 0.1uF 50V
CN1	9-955-602-01	o	910130-10, 10P
D2	8-719-100-41	s	RD6.8E-B2
D3	8-719-104-20	s	03P05M
D4	8-719-961-03	s	RGP10G
D5	8-719-961-03	s	RGP10G
D6	8-719-108-13	s	1S955
IC1	9-955-596-01	s	TL594
Q1	9-955-594-01	s	2SA984
Q2	9-955-595-01	s	2SA743
Q3	9-955-595-01	s	2SA743
R1	1-247-849-51	s	CARBON 5.6K 1/4W 10%
R2	1-247-831-51	s	CARBON 1K 1/4W 10%
R3	1-247-831-51	s	CARBON 1K 1/4W 10%
R4	1-247-831-51	s	CARBON 1K 1/4W 10%
R5	1-247-831-51	s	CARBON 1K 1/4W 10%
R6	1-247-831-51	s	CARBON 1K 1/4W 10%
R7	1-247-823-51	s	CARBON 470 1/4W 10%
R8	1-247-823-51	s	CARBON 470 1/4W 10%
R9	1-247-831-51	s	CARBON 1K 1/4W 10%
R10	1-247-807-51	s	CARBON 100 1/4W 10%
R11	1-247-855-51	s	CARBON 10K 1/4W 10%
R13	1-247-847-51	s	CARBON 4.7K 1/4W 10%
R14	9-955-597-01	s	CARBON 2K 1/4W
R15	1-247-862-11	s	CARBON 20K 1/4W 10%
R16	1-247-825-11	s	CARBON 560 1/4W 10%
T2	9-955-601-01	s	S301-02
T3	9-955-601-01	s	S301-02
VR1	1-237-518-21	s	ADJ, CERMET 10K

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

9-4. ACCESSORY SUPPLIED (BVX-100/100P)

ACCESSORY SUPPLIED

Ref. No. or Q'ty	Part No.	SP	Description
1pc	A-6279-415-A	s	EX-205 ASSY
1pcs	7-682-902-21	s	+PWH 2.6X6
6pcs	7-682-947-01	s	+PSW 3X6
2pcs	X-3673-210-2	o	ANGLE ASSY, RACK
1pc	2-270-616-00	o	HANDLE
2pcs	7-682-262-09	s	+K 4X10
4pcs	7-682-262-09	s	+K 4X10
4pcs	7-682-563-09	s	+B 4X12

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

9-5. ELECTRICAL PARTS LIST (BVR-51)

RM-52C BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-506-796-11	s	D-SUB, 15P
1pc	1-622-423-12	o	PRINTED CIRCUIT BOARD, RM-52
CN1	1-563-771-11	s	SOCKET, D-SUB 15P
CN2	1-506-489-11	s	10P, MALE
CN3	1-506-486-11	s	7P, MALE
IC1	8-759-604-29	s	M5F7805
IC2	8-759-604-47	s	UPC7905H

RM-60 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-562-149-11	o	HOUSING, 4P
1pc	1-564-026-00	o	CONTACT, RECEPTACLE
1pc	1-625-347-11	o	PRINTED CIRCUIT BOARD, RM-60
D2	8-719-812-43	s	TLG124A
S2	1-570-331-11	s	SLIDE

RM-61 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-625-348-11	o	PRINTED CIRCUIT BOARD, RM-61
C1	1-124-234-00	s	ELECT 22uF 20% 16V
CN2	1-506-469-11	s	4P, MALE
CN3	1-506-472-11	s	7P, MALE
IC1	8-759-914-44	s	TL431CLPB
R6	1-214-673-00	s	METAL 4.7 1% 1/4W
S2	1-554-824-11	s	PUSH, 1 KEY

RM-73 BOARD

Ref. No. or Q'ty	Part No.	SP	Description
1pc	1-562-155-11	o	HOUSING, 10P
1pc	1-564-026-00	o	CONTACT, RECEPTACLE
1pc	1-622-422-11	o	PRINTED CIRCUIT BOARD, RM-51
1pc	1-631-178-11	o	PRINTED CIRCUIT BOARD, RM-73
CN3	1-506-489-11	s	10P, MALE
R1	1-237-727-11	s	VAR, CARBON 5K
R2	1-237-727-11	s	VAR, CARBON 5K
R3	1-237-727-11	s	VAR, CARBON 5K
R4	1-237-727-11	s	VAR, CARBON 5K
RV5	1-237-728-11	s	VAR, CERMET 5K
S1	1-571-095-11	s	TOGGLE
S2	1-571-095-11	s	TOGGLE
S3	1-571-095-11	s	TOGGLE
S4	1-571-095-11	s	TOGGLE

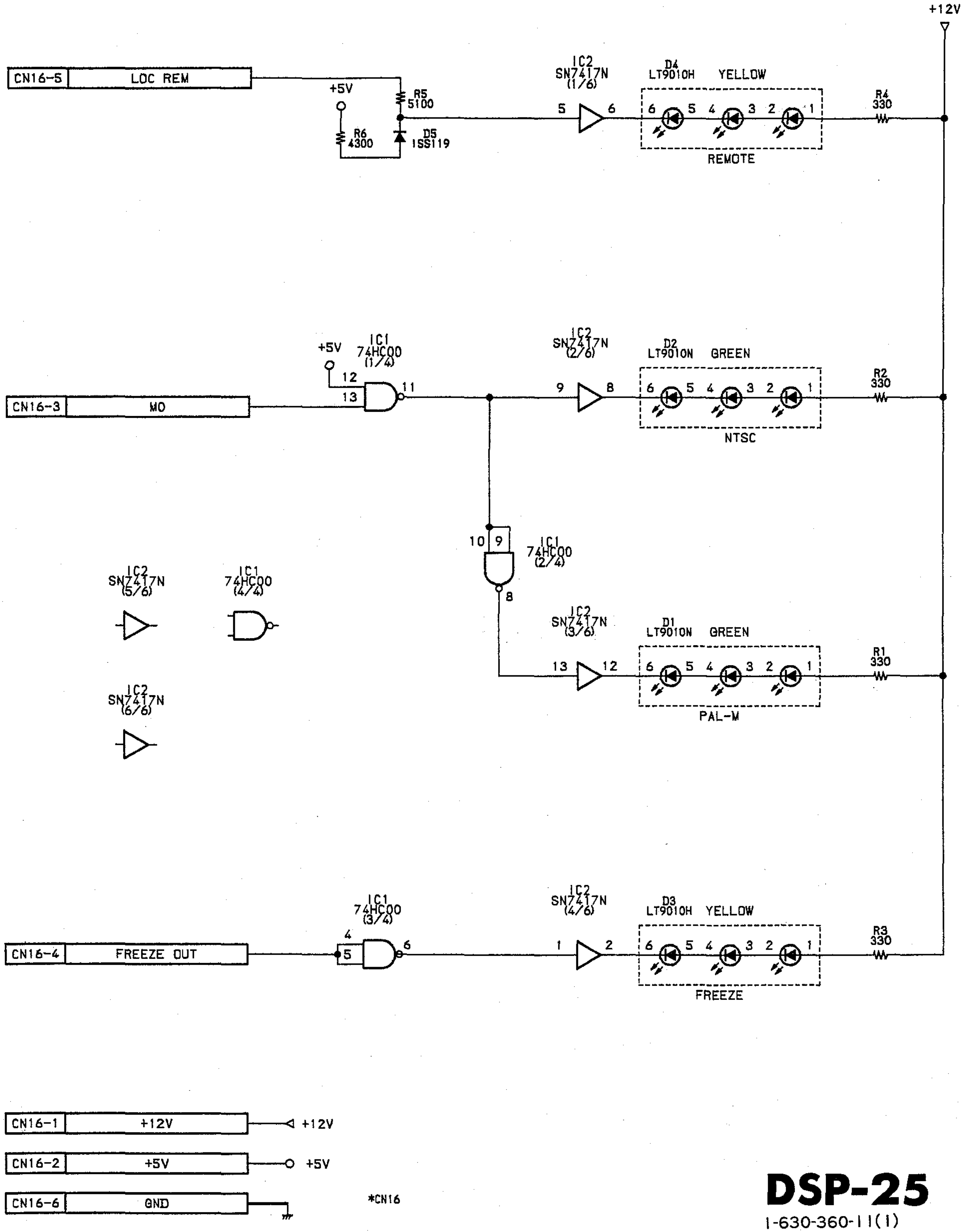
9-6. ACCESSORY SUPPLIED (BVR-51)

ACCESSORY SUPPLIED

Ref. No. or Q'ty	Part No.	SP	Description
2	A-6252-048-A	o	ANGLE ASSY, RACK
2	7-623-207-22	s	SW 2.6, TYPE 2
2	7-683-413-05	s	BOLT,HEXAGON SOCKET 2.6X8
1	2-124-614-01	o	PAD
1	1-559-733-11	o	CABLE ASSY, SHIELD, 15 CORE
15	1-562-580-11	o	TERMINAL SOLDERLESS
2	1-563-376-11	s	SHELL,METAL PLATING, D-SUB 15P
1	1-563-816-11	s	SOCKET, D-SUB 15P
15	1-564-775-11	s	CONTACT, PLUG
1	1-566-355-11	o	PIN, D-SUB 15
2	2-124-616-01	o	CUSHION
4	7-682-966-01	s	+PSW 4X20

Parts that are not listed in the "reference number order list" are shown in the "General Purpose Electrical Part List".

DSP-25 ; INDICATOR


+12V
CN16-5
LOC REM
+5V
R5
5100
R6
4300
D5
1SS119
IC2
SN7417N
(1/6)
5
6
D4
LT9010H
YELLOW
6 5 4 3 2 1
REMOTE
R4
330
IC1
74HC00
(1/4)
+5V
12
13
11
CN16-3
MO
IC2
SN7417N
(2/6)
9
8
D2
LT9010N
GREEN
6 5 4 3 2 1
NTSC
R2
330
10
9
IC1
74HC00
(2/4)
8
IC2
SN7417N
(5/6)
IC1
74HC00
(4/4)
IC2
SN7417N
(6/6)
IC2
SN7417N
(3/6)
13
12
D1
LT9010N
GREEN
6 5 4 3 2 1
PAL-M
R1
330
CN16-4
FREEZE OUT
IC1
74HC00
(3/4)
4
5
6
IC2
SN7417N
(4/6)
1
2
D3
LT9010H
YELLOW
6 5 4 3 2 1
FREEZE
R3
330
CN16-1
+12V
+12V
CN16-2
+5V
+5V
CN16-6
GND
*CN16

DSP-25
1-630-360-11(1)
BVX-100/100P

SECTION 9
SPARE PARTS AND ACCESSORIES

9-1. PARTS INFORMATION

(1) The shaded and ⚠ -marked components are critical to safety.
Replace only with same components as specified.

(2) Replacement Parts supplied from the Sony Parts Center will sometimes have a different shape from the original parts. This is due to "accommodating the improved parts and/or engineering changes" or "standardization of genuine parts".
This manual's exploded views and electrical spare parts list indicate the part numbers of "the standardized genuine parts at the present". Regarding engineering part changes in out engineering department, refer to Sony service bulletins and service manual supplements.

(3) The parts marked with "s" in the SP column of the exploded views and electrical spare parts list are normally stocked for replacement purposes. The parts marked with "o" in the SP column are not normally required for routine service work. Orders for parts marked with "o" will be processed, but allow for additional delivery time.

(4) Item with no part number and/or no description are not stocked because they are seldom required for routine service.

(5) ABBREVIATIONS

Ref.No.	Description
BT	; BATTERY
BZ	; BUZZER
C	; CAPACITOR
CB	; CIRCUIT BREAKER
CN	; CONNECTOR
D	; DIODE
FR	; FLUORESCENT LAMP
IC	; INTEGRATED CIRCUIT
L	; INDUCTOR
P	; PHONE PLUG
Q	; TRANSISTOR
R	; RESISTOR
RB	; RESISTOR BLOCK
RV	; VARIABLE RESISTOR
S(SW)	; SWITCH
T	; TRANSFORMER
X	; CRYSTAL

All capacitors are in micro farads unless otherwise specified.

All inductors are in micro henries unless otherwise specified.

All resistors are in ohms.

9-2. EXPLODEO VIEW

.Exploded views are composed of the following blocks.

(1) Chassis Assy
(2) Rear Panel Assy
(3) Power Supply Assy
(4) BVR-51